



Everything Timex/Sinclair

The Guide to All Hardware, Software and
Accessories for the Timex/Sinclair Computers

Everything Timex/Sinclair

**Volume 1: Hardware, Software and
Accessories for the Timex/Sinclair Computers**

Dedication

This book would not be possible without the thousands of Timex/Sinclair enthusiasts who formed user groups, published newsletters, wrote articles for magazines, wrote and distributed their software, invented hardware and otherwise supported their computers and fellow enthusiasts for years after Timex Computer Corporation exited the market in February 1984.

This book is dedicated to each and every person who owned or still owns a Sinclair or Timex/Sinclair computer.

And, of course, to Sir Clive Sinclair. His vision, innovation and ingenuity inspired us all.

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Introduction

1980 was a tumultuous year in the United States. The Iran hostage crisis dominated the news cycle for much of the year. The federal government bailed out the Chrysler Corporation and ABSCAM snared members of Congress in a sting operation.

The United States Olympic Hockey Team defeated the Soviet Union in the “Miracle on Ice” at the XIII Winter Olympics in Lake Placid, N.Y.

Kramer vs. Kramer won several Oscars. A commando mission in Iran to rescue American embassy hostages failed with a mid-air collision that killed several American rescuing troops.

The United States suffered through the intense heat and drought of a massive summer heat wave that claimed 1,700 lives.

Mount St. Helens erupted, killing 57 people and The Empire Strikes Back was released. Pac-Man hit the arcades.

The comic strips Bloom County and The Far Side launched that year, as did the the cable news channel CNN.

Ronald Reagan defeated Jimmy Carter in the presidential election and Americans were obsessed with the TV show Dallas.

In December, Mark David Chapman shot and killed John Lennon.

And in the January 31 edition of The Wall Street Journal, a small item appeared about a “small, low-priced microcomputer” that would be available to Americans later that year. The Sinclair ZX80 was a diminutive but reasonably full-featured home computer priced at just under \$200.

The Sinclair ZX80 launched tens of thousands of computer hobbyists. By the time it was officially available in the US, almost nine months later, UK enthusiasts were snapping up 8,000 units a month.

The Sinclair was a such an innovative and inspirational product that it had its own magazine, Syntax ZX80, within months of its American launch. SYNC, another magazine dedicated to the Sinclair computers, published its first issue in February 1981.

Sinclair Research initially sold their computers by mail order and even with that limitation, they sold tens of thousands. With the launch of the ZX81 less than a year later, Sinclair entered into an agreement with Timex, the company that manufactured the ZX81 for Sinclair, that would lead to more than a million units being sold.

The deal with Timex led directly to the Timex/Sinclair 1000, a modest upgrade to the ZX81 that Timex launched only after Sinclair had sold 500,000 ZX81 computers in the United States.

The Sinclair-Timex deal gave Timex the option on future Sinclair computers and they leveraged that into the Timex/Sinclair 1500 and 2068 computers. The 1500 was a stop-gap improvement to the 1000 that picked up features from the Sinclair ZX Spectrum. And the 2068 was Timex's improved and re-engineered ZX Spectrum, built with features necessary to the American market.

The Sinclair computers were considered fringe machines. They were tiny, the keyboards were unconventional, they lacked the official expansion options available to owners of other computers. In a word, they were cheap.

Computers produced by Sinclair's competitors (Apple, Atari, Commodore, Radio Shack, Texas Instruments) all had more conventional feature sets and options: full-size keyboards, memory expansion up to 64K, disk drives, printers et cetera.

ZX80 and ZX81 owners had to wait for Sinclair to eke out small memory expansion units that maxed out at 16K and a printer that was decidedly substandard.

Enthusiasts who wanted the 2068 had to wait months while Timex developed features and ironed out bugs.

Then, in early 1984, just a little over four years after the ZX80 announcement, Timex pulled out of the home computer market. Their color computer, the 2068, had been available for fewer than 6 months.

And yet, despite all this, Timex and Sinclair owners were dedicated and enthusiastic. They figured out how to wire full-size keyboards to their computers, build their own RAM and printer interface devices, even their own disk drive systems.

What you'll see throughout this book is evidence of that dedication, drive and tenacity. At nearly every turn, Sinclair and Timex fell short of the mark. In every way, the owners figured it out for themselves, started small businesses and brought those solutions to their fellow owners.

The popular computing press eagerly documented the shortcomings of the Sinclair and Timex computers, especially in comparison to other home computers.

But hardcore TS owners were tenacious and resilient. They insisted their computers could do everything other home computers could and proved it, time and again. If it was available for another home computer, TS owners figured out how to make it happen on their computers.

The TS owners didn't abandon their favorite computers in February 1984. Instead, they hunkered down, pushing and prodding their computers well into the 1990s.

Whether it was sunk-cost fallacy or their perverse dedication to their favorite computer that drove them, TS owners overcame adversity and uses their computers for real work well past the expiration date.

In this book, you'll find everything from modems to disk drive systems, interfaces to the external world and professional keyboards. The software ranges from the trinity of "serious" software (databases, spreadsheets and word processors) to fanciful games, art and desktop publishing programs.

Even today, a cadre of serious and intent owners are finding ways to keep their computers alive and even extend them, breathing life into them for another several decades.

This book contains every single hardware, software product or accessory I have been able to find that was marketed in the United States for the Sinclair ZX80, ZX81, Timex/Sinclair 1000, Timex/Sinclair 1500 or Timex/Sinclair 2068.

I compiled this information for my website, timexsinclair.com. Photos of many of the products are on the website, along with the advertisements and other information. I've cut the information presented here down to mostly text because, at nearly XXX pages, it's huge.

I welcome your corrections, additions and shared enthusiasm. Please visit my website and drop me a line.

Best,

David Anderson
September 2021

About this book

In the Hardware, Software and Accessories sections, each product is listed with its producer, the author (if known), date of release, original price and the computer(s) the product worked with.

Because the ZX81 and TS 1000 were so similar, I use TS 1000 for both machines. Where product works specifically with the ZX81, it'll be listed. A good example is software that runs in 1K, the amount of memory in the unexpanded ZX81. In those instances, I use ZX81 to indicate that this program will run within 1K.

I assume you're reasonably familiar with terms like CPU, ROM, RAM and other bits of "computerese." If not, Wikipedia often has excellent definitions and explanations.

Where to find more information and resources

I compiled the products and companies in a database over several years, entering everything I found listed in the many American publications that supported Timex/Sinclair users. I have pored over every issue of SYNC, ZX Syntax, SyncWare News, Time Designs Magazine ... and every single usergroup newsletter I've been able to find.

Everything in here is also on my website: **timexsinclair.com**.

I've purchased all sorts of magazines, newsletters, books, manuals and other paper documents on auction sites and other places. Everything I purchase, I have also scanned and uploaded to archive.org. My goal has been to make everything I can find available to anyone who'd like it in as permanent a manner as possible. That's why I uploaded it to archive.org.

You can find everything I've scanned here: **<https://archive.org/details/@factus10>**.

Others have also uploaded their stuff to archive.org, so search around.

The Computers

Clive Sinclair was always very clear about the products he designed, from the radios to the calculators, to the digital watch and the ZX Spectrum: they needed to accomplish the goal in a way that broke a price barrier.

His products did that but at a cost: the product would nominally fulfill its duty but in a slightly idiosyncratic, unconventional way. And with some shortcut that resulted in subpar performance on a key aspect.

This, in a nutshell, describes the Sinclair computers. The ZX80 is nominally a computer. It has a CPU, BASIC interpreter in ROM, RAM, a keyboard, displays its output on a TV screen and has mass storage.

With the exception of the CPU, everything else is a compromise. The BASIC interpreter is extraordinarily small and limited. There's 1K of RAM, which is shared with the display and limits the user to incredibly short programs. The display, at 32 columns by 24 rows, is small and bizarre. It blanked out at every keystroke.

The mass storage is limited to cassette tapes, a technology already surpassed at the time by disk drives.

And then there's the keyboard. It's tiny. It's flat. There is, quite literally, no physical confirmation that you've pressed a key. Touch typing on it is, for all practical purposes, impossible. It is an insult to call it a keyboard.

All of these shortcomings are widely acknowledged at the time.

And yet, it sold. It sold to people who could not see it or touch it before they bought it. They had no idea how it worked and it sold like hotcakes.

All of the Sinclair computers followed that ethos of trade-offs: compromised power for a shocking low price.



Sinclair ZX80

The ZX80 was Sinclair's first computer sold in the United States. Launched in June 1980, the ZX80 was notable for its size, weight and price. At 7" x 9", weighing less than a pound and priced at \$199.50, it was the smallest, lightest and least expensive home computer available at the time.

The ZX80 was named after the Z80 processor with the 'X' meaning "the mystery ingredient". Sinclair retained the ZX prefix for subsequent computers up to the QL.

It featured 1K of RAM, a 4K ROM that contained a limited version of BASIC and it connected to the owner's TV for display. Like many other home computers available then, it used cassette tape for storage.

The ZX80 was designed around readily available and inexpensive TTL integrated circuits ("chips"). The only proprietary technology was the firmware.

Sinclair cut costs by using an inexpensive case and a flat, membrane keyboard. The individual keys were etched on the circuit board and covered by a thin, conductive membrane printed with the key symbols.

BASIC

The majority of home computers available in 1980 contained a BASIC interpreter in ROM. In most of those computers, the BASIC ROM was at least 8K (8,192 bytes) in size and supported most of the features of Dartmouth BASIC they were based on.

An 8K BASIC interpreter was the base level against which other systems were measured. An “extended” BASIC might be in a larger, 16K ROM or load from disk, for example.

By contrast, the original ZX80 BASIC was contained in a 4K ROM. It was impossible to include the entire BASIC keyword and feature set and the ZX80 BASIC was a subset of the standard.

Sinclair saved ROM space by upending how BASIC programs were entered. Instead of typing out the full keyword, most Sinclair BASIC keywords were entered via a single keystroke (or with a shift key). Entering “PRINT”, for instance, required only a press of the O key.

Only six functions were entered manually: they were listed on a small sticker on the front of the computer.

Space saving efforts resulted in other shortcomings in Sinclair BASIC, including:

- Lack of support for named files. Users merely “SAVEd” or “LOADed” the next program on the tape. File management was entirely up to the user.
- Some features in other BASICs, most notably READ, DATA and RESTORE, were missing from Sinclair BASIC.
- Numeric variables were limited to integer values from -32768 to 32767.
- Only 26 string variables (A\$ to Z\$) were available.
- Line numbers were limited to 1 to 9999.
- Statements were limited to one per line number.

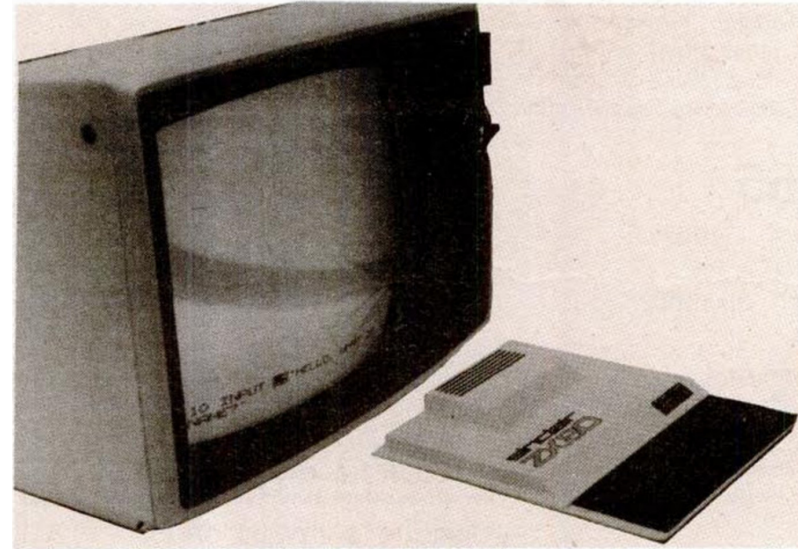
On the other hand, Sinclair BASIC had dynamic syntax checking. The ZX80 would check the program line as the user entered it and it would not let users enter invalid program code.

Video Display

The ZX80 display was equally unconventional. Instead of a full-screen of code where any line could be edited at will, the ZX80 display was divided in to an upper area of 32 characters across by 22 lines down. A lower section, of two lines, was the “input area” where users enter program lines or responded to input prompts from the computer.

The ZX80 was limited to upper case letters and the organization of characters was not compatible with ASCII, the industry standard. Special block characters and their inverse (reverse video) allowed users to make relatively low resolution graphic displays.

Video signal generation was one most notable trade-offs. While the central processor unit (CPU) ran at approximately twice speed as other Z80-based computers, it also generated the video signal. The CPU paused the video signal when performing computing tasks, resulting in the TV picture disappearing. Running a program or pressing a key caused the screen to blank.



The new Sinclair ZX80 is a Z-80 based computer that will sell for \$199.95. Initially, the ZX80 will be available only through mail order, directly from Sinclair Research Ltd., 50 Staniford St., Boston, MA 02114. A Basic interpreter is contained in an 8K ROM; RAM can expand up to 16K; and interfaces for printers, disk and cassette storage will be available soon. Sinclair is adapting existing Basic programs to run on the system.

This made moving graphics difficult since the programmer had to pause the program so the computer could update and turn on the display. Softsync's Super ZX80 Invasion, released in early 1981, was one program that overcame this shortcoming.

The computer's RAM stored the screen display. As a result, the available screen size would

decrease as the size of a program increased (and vice versa). With 1 KB RAM, a 990 byte program would result in only one row of characters being visible on the screen. At the other end, a full screen (32x24) would leave only 384 bytes to the programmer.

Expansion

Other than the built-in cassette and video ports, the only means of expansion was a slot opening at the rear of the case, which exposed an expansion bus edge connector on the motherboard. The original Sinclair ZX80 RAM pack held either 1, 2 or 3KB of static RAM and a later model provided 16KB RAM.

Sinclair announced an 8KB ROM to upgrade the ZX80 at a cost of around 20% of a ZX81. While it was not actually available until after the ZX81 launched, it was popular with ZX80 owners.

The new ROM came with a thin keyboard overlay and a ZX81 manual. Users opened their ZX80, pried the old ROM from its socket and inserting the new ROM and replacing the keyboard overlay. The new ROM did not have the ZX81's SLOW mode: it required hardware not in the ZX80. Several companies made upgrades to address even that shortcoming.

Because tapes were not compatible between the two ROMs, some enterprising users build special circuits to allow them to easily switch between the two.

Hobbyists also attached full-size keyboards to their ZX80s, even moving the motherboard into a larger case. This had the dual advantages of making the machine easier to type on, while increasing ventilation to the motherboard.

Reception

The ZX80 was widely advertised as the first personal computer for under £100 (US \$200).

The first mention of the ZX80 in the US was in the January 31, 1980 edition of the Wall Street Journal, which announced that the computer would “be marketed by the company's Boston office in a few months.”

The Wall Street Journal article noted the unique physical attributes and price of the computer, which was less than half of other personal computers. Sinclair estimated that 20,000 - 30,000 personal computers were sold a month.

Sinclair formally introduced the ZX80 at the 1980 Summer Consumer Electronics Show in Chicago. Creative Computing and Infoworld were among several specialty magazines to highlight the computer in their coverage of the event.

By November 1980, Syntax ZX80, a newsletter dedicated just to the ZX80, launched. SYNC magazine, also dedicated to the ZX80, appeared in January 1981.

Reviews of the computer appeared in popular computing magazines as early as December 1980.

Kilobaud Microcomputing liked the design of the preassembled version, and said that the screen flickering during input or output was annoying but was useful as an indicator of the computer functioning correctly. It praised the documentation as excellent for novices, and noted that purchasing the computer was cheaper than taking a college class on BASIC. The magazine concluded the “ZX-80 is a real computer and an excellent value,” but only for beginners who could learn from the documentation or programmers experienced with writing Z-80 software.

BYTE called the ZX80 a “remarkable device.” It praised the real-time, interactive BASIC syntax checking, and reported that the computer performed better on benchmarks than some competitors, including the TRS-80 Model I. The screen blanking during program execution, small RAM size and inadequate built-in Sinclair BASIC, and the keyboard received criticism, and the review recommended against buying the kit version of the computer given the difficulty of assembly and because purchasers did not save money. BYTE concluded that “the ZX80 might be summarized as a high-performance, very low-cost, portable personal computer system ... the ZX80 is a good starting point.”



Sales

Almost all ZX80s were sold by mail order: Sinclair did not have a distribution network in the United States. Potential owners read about the ZX80 in magazines and ordered it without having seen it in person.

At the time, it was not unusual for computer and electronics hobbyists to purchase products via mail order. Most cities did not have computer stores and those that did sold systems that cost thousands of dollars. Radio Shack stores brought their computers to many cities and smaller towns but even the least expensive TRS-80 was more than twice the cost of the ZX80.

Advertisements for the ZX80 started to appear in popular computing magazines in the fall of 1980. Among other things, the ads mentioned that tens of thousands had sold in Europe. Nigel Searle, a Sinclair representative, mentioned world-wide sales had exceeded 50,000 at a user group meeting in December 1980.

By March 1981, Infoworld called them the “third major competitor in the personal-computer industry.”

The New York Times reported that Sinclair was producing 10,000 ZX80s a month in April 1981, third in volume behind Apple and Radio Shack. An article in The Guardian noted that 30,000 units has been sold in the US alone by July 1981.

1K or 2K RAM AVAILABLE!

IMMEDIATE DELIVERY

MicroAce

A Microcomputer for everyone at a Micro Price

Licensed by Sinclair Research Ltd.

The **MicroAce** - a new generation of miniature computers

A COMPLETE COMPUTER for \$149.00 for 1K Kit

Post and Packing FREE
(Add 6% Tax for Shipments inside California)

The unique and valuable components of the MicroAce

The MicroAce is not just another personal computer. Quite apart from its exceptionally low price, the MicroAce has two uniquely advanced components: the powerful BASIC interpreter, and the simple teach yourself BASIC manual.

The unique versatile BASIC interpreter offers remarkable programming advantages:

- **Unique 'one-touch' key word entry:** the MicroAce eliminates a great deal of tiresome typing. Key words (RUN, PRINT, LIST, etc.) have their own single-key entry.
- **Unique syntax check.** Only lines with correct syntax are accepted into programs. A cursor identifies errors immediately. This prevents entry of long and complicated programs with faults only discovered when you try to run them.
- **Excellent string-handling capability** - takes up to 26 string variables of any length. All strings can undergo all relational tests (e.g. comparison). The MicroAce also has string input - to request a line of text when necessary. Strings do not need to be dimensioned.
- Up to 26 single dimension arrays.
- FOR/NEXT loops nested up to 26.
- Variable names of any length.
- BASIC language also handles full Boolean arithmetic, conditional expressions, etc.
- Exceptionally powerful edit facilities, allows modification of existing program lines.
- Randomise function, useful for games and secret codes, as well as more serious applications.
- Timer under program control.

- PEEK and POKE enable entry of machine code instructions, USR causes jump to a user's machine language sub-routine.
- High-resolution graphics with 22 standard graphic symbols.
- All characters printable in reverse under program control.
- Lines of unlimited length.

'Excellent value' indeed!

For just \$149.00 (excluding handling charge) you get everything you need to build a personal computer at home... PCB, with IC sockets for all ICs; case; leads for direct connection to a cassette recorder and television (black and white or color); everything!

Yet the MicroAce really is a complete, powerful, full-facility computer, matching or surpassing other personal computers at several times the price.

The MicroAce is programmed in BASIC, and you can use it to do quite literally anything, from playing chess to managing a business.

The MicroAce is pleasantly straightforward to assemble, using a fine-tipped soldering iron. It immediately proves what a good job you've done: connect it to your TV ... link it to the mains adaptor ... and you're ready to go.

Fewer chips, compact design, volume production-more power per Dollar!

The MicroAce owes its remarkable low price to its remarkable design: the whole system is packed on to fewer, newer, more powerful and advanced LSI chips. A single SUPER ROM, for instance, contains the BASIC interpreter, the character set, operating system, and monitor. And the MicroAce 1K byte

RAM (expandable to 2K on board) is roughly equivalent to 4K bytes in a conventional computer - typically storing 100 lines of BASIC. (Key words occupy only a single byte.)

The display shows 32 characters by 24 lines.

And Benchmark tests show that the MicroAce is faster than all other personal computers.

No other personal computer offers this unique combination of high capability and low price.

The MicroAce teach-yourself BASIC manual.

If the features of the BASIC interpreter mean little to you - don't worry. They're all explained in the specially-written book *free* with every kit! The book makes learning easy, exciting and enjoyable, and represents a complete course in BASIC programming - from first principles to complex programs. (Available separately - purchase price refunded if you buy a MicroAce later.)

A hardware manual is also included with every kit.

The MicroAce Kit:
\$149.00 with 1K COMPLETE
\$169.00 with 2K

Demand for the MicroAce is very high: use the coupon to order today for the earliest possible delivery. All orders will be despatched in strict rotation. If you are unsuccessful in constructing your kit, we will repair it for a fee of \$20.00, post and packing FREE. Of course, you may return your MicroAce as received within 14 days for a full refund. We want you to be satisfied beyond all doubt - and we have no doubt that you will be.

280 A microprocessor chip, widely recognised as the best ever made.

Sockets for TV, cassette recorder, power supply.

Your MicroAce kit contains...

- Printed circuit board, with IC sockets for all ICs.
- Complete components set, including all ICs all manufactured by selected world-leading suppliers.
- New rugged keyboard, touch-sensitive, wipe-clean.
- Ready-moulded case.
- Leads and plugs for connection to domestic TV and cassette recorder. (Programs can be SAVED and LOADED on to a portable cassette recorder.)
- Mains adaptor of 600 mA at 9VDC nominal unregulated.
- FREE course in BASIC programming and user manual.

JOIN THE REVOLUTION - DON'T GET LEFT BEHIND - ORDER YOUR MICRO ACE NOW!!

Send Check, Money Order or quote your Credit Card No. to:
MicroAce 1348 East Edinger, Santa Ana, California, Zip Code 92705.
or phone (714) 547 2526 quoting your Credit Card Number.

Quantity	Description	Unit Price	TOTAL
	MicroAce Kit 1K	\$149.00	
	MicroAce Kit 2K	\$169.00	
	Manual	\$10.00	
	1K Upgrade Kit	\$29.00	
Shipments inside California add 6% TAX		TOTAL	

Name _____

Address _____

City _____ State _____ Zip _____

Amex. ☐

Diners ☐

Check ☐

Money Order ☐

Master Charge ☐

Visa ☐

Card No. _____

Exp. Date. _____

MicroAce

The MicroAce was an unlicensed clone of the ZX80, produced by Comp Shop and internally expandable to 2K RAM.

According to Alfred Milgram, president of Melbourne House, Comp Shop had "... a history of copying. At one stage they couldn't get enough supplies from Ohio Scientific, so they redesigned the OSI Superboard and got the ROM from Microsoft."

When Sinclair launched the ZX80, "... they figured here was a golden opportunity to save on development costs and come out with effectively the same machine. They copied the ROM, byte for byte, moved the circuits about, cleaned it up a bit, and moved the RAM memory away from the heat sink. The case is black instead of white. [They] were going to market it in the UK for £50 (less than the £70 of the ZX80)."

Differences from the ZX80

The MicroAce differed most from the ZX80 on cosmetics. The case was black and the keyboard was red (versus the blue ZX80 keyboard). Internally, a few signal lines to the ROM were “scrambled” but a simple user modification corrected that, making it compatible with the 8K ROM.

Copyright Lawsuit

Sinclair sued for breach of copyright: for stealing the ROM and the keyboard. The judge could not understand the ROM and initially claimed it was not protected by copyright. The keyboard was more obvious: the judge agreed with Sinclair. As a result, Sinclair and Comp Shop settled out of court.

Sinclair granted Comp Shop exclusive rights to sell the kit in the US as the MicroAce. Comp Shop also paid royalties to Sinclair.

Sales

The MicroAce was marketed exclusively via mail order in the United States.

David Ahl, publisher of Creative Computing and SYNC, observed that “they have been restricted by Sinclair from advertising in a certain group of publications that Sinclair has reserved for itself. Sinclair has more or less picked the top one or two magazines in each individual field and left the balance to MicroAce which is a policy, in my mind, to defeat MicroAce.”

Sinclair did not renew Comp Shop's license when they introduced the ZX81. Comp Shop exited the microcomputer market in the summer of 1981.



Introducing the Sinclair ZX81.

If you're ever going to buy a personal computer, now is the time to do it.

The Sinclair ZX81 is the most powerful, yet easy-to-use computer ever offered for anywhere near the price: only \$149.95* completely assembled.

Don't let the price fool you. The ZX81 has just about everything you could ask for in a personal computer.

A breakthrough in personal computers.

The ZX81 is a major advance over the original Sinclair ZX80—the first personal computer to break the price barrier at \$200.

In fact, the ZX81's 8K extended BASIC offers features found only on computers costing two or three times as much.

Just look at what you get:

- Continuous display, including moving graphics

THE \$149.95 PERSONAL COMPUTER.

- Multi-dimensional string and numerical arrays
- Mathematical and scientific functions accurate to 8 decimal places
- Unique one-touch entry of key words like PRINT, RUN and LIST
- Automatic syntax error detection and easy editing
- Randomize function

useful for both games and serious applications

- Built-in interface for ZX printer
- 1K of memory expandable to 16K
- 164-page programming guide and operating manual

The ZX81 is also very convenient to use. It hooks up to any television set to produce a clear 32-column by 24-line display. It comes with a comprehensive 164-page programming guide and operating manual designed for both beginners and experienced computer users. And you can use a regular cassette recorder to store and recall programs by name.



Sinclair ZX81

The Sinclair ZX81, developed by Sinclair Research and manufactured by Timex Corporation in Dundee, Scotland, was the first home computer sold in the United States for under \$150.

Launched in England on March 5, 1981, the ZX81 was designed to be a low-cost introduction to home computing for the general public.

The 1KB on-board memory could officially be expanded externally to 16KB. The ZX81 reduced the 21 individual integrated circuits of the ZX80 to four: the 3.5 MHz Z80A 8-bit microprocessor from NEC, an uncommitted logic array (ULA) chip from Ferranti, an 8 KB ROM containing Sinclair's BASIC interpreter and 1K of RAM. The ULA alone replaced 18 chips in the ZX80. And the ZX81 weighed even less than the ZX80, just 12 oz.

Like the ZX80, it had a flat, membrane keyboard and connected to the user's television set. It produced a black-on-white video signal and comparatively low resolution graphics. The ZX81 added a "slow" mode that generated a constant screen display but limited computation to the vertical blank time.

Sales

Despite its limitations, the ZX81 sold like gangbusters; more than 1.5 million units were sold worldwide. Even with its limitations, the ZX81 at one point sold faster than Timex could manufacture them for Sinclair.

Sinclair officially launched the ZX81 in the US on October 7, 1981 with 20,000 units available for sale, at a price of \$149.95 assembled and \$99.95 in kit form. As with the



Worker at the Dundee factory testing Sinclair ZX81 computers.

ZX80, they sold directly to the American market by mail order, via ads in computer publications and popular consumer magazines.

Sales reached 15,000 a month by January 1982.

A deal with American Express to including marketing material and order forms in 2 million of their customer's bills resulted in massive interest in the computer. 2,000 orders were received by noon the day following the offer and American Express sold more than 25,000 units in total.

By August 1982 Sinclair had lowered the American mail-order price of the assembled ZX81 to \$99.95 and kit to \$79.95, and its advertisements stated that "more than 10,000 are sold every week".

Timex's option to sell the computer directly, as the Timex/Sinclair 1000, kicked in when Sinclair's American sales reached 500,000 units.

BASIC

Sinclair's 8K BASIC was a more complete but not-quite full BASIC. Features like READ, DATA and RESTORE were still missing but the math package was improved, incorporating trigonometric and floating point functions.

Where the ZX80 could only handle integer numbers (and within a limited range), the ZX81 could operate on very large numbers.

String handling and other aspects of the BASIC were vastly improved as well.

Video Display

Like the ZX80, the screen displayed 32 characters across by 24 lines. The first 22 lines displayed the output of the program and the last two were the "input area", where users entered program lines or responded to prompts from the program.

Like the ZX80 before it, the CPU in the ZX81 generated the video signal. In FAST mode, the processor stopped generating the video signal when performing other computing tasks, resulting in the TV picture disappearing. Each key press resulted in a blank screen.

The ZX81 added a new, SLOW display mode. In SLOW mode, all computing takes place during the vertical blank period, a small window of time when the electron gun in a TV traces from the bottom of the screen back to the top.

Expansion

The popularity of the ZX81 spawned a huge array of aftermarket accessories, including full-size keyboards, RAM, alternate language ROMs, printer interfaces and more. Many devices connected to the expansion port on the rear of the computer.

Reception

Clive Sinclair revealed the ZX81 to American readers in an article in New York Times, published in April 1981. The article revealed the company had contracted with Timex to produce both "minitelevisions" and the ZX81 at its Dundee, Scotland, plant.

Sinclair showed the ZX81 at the 1981 Summer Consumer Electronics Show, which garnered some positive press for the computer.

Reviews of the ZX81 noted many of the same limitations observed in the ZX80: its small size, limited memory and flat keyboard.

Popular Electronics said "we were surprised at the amount of computing power that Sinclair packed into such a small computer (you can carry this little wonder in a jacket pocket without making a bulge). The BASIC is as good as anything around in small computers."

TIMEX Sinclair 1000 Personal Computer



(6 7/8" x 6 3/4" x 1 3/4" — 12 ounces)

Powerful — Fully programmable 2K personal computer

Portable — 12 ounces of sophisticated design

Expandable — Optional 16K RAM module (modem and printer available soon)

Educational — Excellent for teaching a wide variety of academic subjects

Versatile — A wide and growing variety of cassette programs

Programmable — Anyone can devise their own programs

Learnable — Our clearly written manual makes it easy

Usable — Anywhere there's a TV set

Affordable — Suggested retail price \$99.95

The Timex Sinclair 1000 personal computer features:

- Single-key entry of commands — LIST, RUN, PRINT, etc.
- Unique syntax-check and report codes for immediate error identity

- Full range math and scientific functions — accurate to nine and one-half decimal places
- Graph drawing and animated display
- Advanced 4-chip design — microprocessor, ROM, RAM, and Master Chip — combining power, portability and truly affordable price.



Timex/Sinclair 1000

Timex announced that it would market the Timex/Sinclair 1000, the first computer to break the \$100 price barrier, on April 20, 1982.

Launched a few months later in July 1982, the Timex/Sinclair 1000 was a modest improvement over the Sinclair ZX81, upgrading RAM from 1K to 2K.

Timex ran numerous TV and print ads that September which provided a toll-free number for more information. Response was so enthusiastic that, at one point, Timex operators were receiving 5,200 calls per hour, 50,000 a week, inquiring about the machine or about microcomputers in general.

By November, Timex's manufacturing facilities were producing one computer every ten seconds and production had still not caught up to demand. In addition to the Timex plant in Dundee, Scotland, Timex opened two new factories in the US.

BASIC and Expansion

The TS 1000 featured the same Sinclair BASIC as the ZX81; all the software, hardware and accessories that worked on the ZX81 also worked on the TS 1000.

Reception

Despite the prior exposure of the ZX81, the TS 1000 received an enthusiastic reception in even wider computing and popular publications.

In part, this was evidence of Timex’s more significant marketing effort. It can also be attributed to a booming home computer market, where new products were announced almost every day.

Electronic Fun with Computer & Games printed a review that was effusive and sober (its “restrictions make is a superior program training tool, allowing you to learn, not just do”) and a resource guide.

According to Dan Ross, vice-president of computer products, “600 and 700 companies offering add-ons for the computer [had] sprung up” by November 1982.

Moving past reviewing just the computers, the computer press began reviewing software, hardware and books for the Sinclair computers in earnest.

Sales

The TS 1000 sparked a massive surge of interest when it was launched in July 1982.

Timex, despite having no experience marketing computers, did have experience selling consumer products in retail. When they entered the market, they had access to 171,000 retail locations that already sold their products.

Consumers suddenly had the option to buy computers from places they already knew and trusted, from department stores and chains like K-Mart to computer stores, consumer electronics, jewelry and drug stores.

K-Mart alone had more than 1,100 stores selling home computers. And, Timex offered large retailers like K-Mart a standalone kiosk to push sales of the computer.

Furthermore, they hired experience marketing staff like Margot Murphy to the subsidiary, Timex Computer Corporation, to ensure a successful launch. Murphy oversaw design and production of the product packaging and marketing materials and gathered consumer market research, even visiting individual retail locations to see and hear how customers experienced the product.

Timex’s marketing prowess paid off handsomely: in the five months following the TS 1000’s launch, the company sold 550,000 machines.

According to Future Computing, a computer research firm, Timex sold 20 percent of all home computers purchased in 1982.

Timex was also incentivized by its deal with Sinclair, who allowed them to sell up to 900,000 units royalty-free.



Timex/Sinclair 1500

The Timex/Sinclair 1500 was a stop-gap product intended to keep consumers interested in Timex computers until it could launch the TS 2068.

Announced May 17, 1983, it was a redesigned TS 1000 with 16K RAM built in using the case and keyboard of the Sinclair ZX Spectrum.

Timex expected to launch the computer in July but manufacturing delays pushed the actual launch back to September.

The TS 1500 was manufactured at the Timex plant in Portugal.

The initial retail price was \$79.99. Just the month prior, Timex lowered the retail price of the TS 1000 to \$49.95.

Timex introduced a cartridge accessory (the 1510) and a few cartridges to help the TS 1500 compete against video game systems and other computers with cartridge systems. The cartridge instant load feature introduced a bug in the 1500.

Cartridge-based software was expected to sell for between \$13 and \$30, depending on the complexity of the program.

Hardware Changes

The TS 1000 circuit board was redesigned to fit the ZX Spectrum case and keyboard connectors. At the same time, the Ferranti ULA present in the ZX81 and TS 1000 was replaced with a 68-pin custom logic chip, produced by NCR, that required less power. That reduced the overall heat output when compared to the ZX81/TS 1000.

Other changes included:

- ROM properly decoded to the lowest 8K, eliminating the “ghost” images
- Expandable to 32K RAM with some 16K RAM packs
- Key-selectable TV channel

The Sinclair Timex User Group of the Boston Computer Society reported in its newsletter that Timex claimed the 1500 would have “8-bit bank switching to give 64 megabytes of addressability.”

A few POKEs are required for the system to recognize additional RAM. Not all RAM modules would work with the 1500. The rearranged power and cassette connectors prevented longer units like Memotech’s from properly connecting to the computer.

Even with an extender card, a number of RAM packs would not work because Timex changed a signal on the edge connector.

While Timex fixed some of the bugs in the 1000 ROM, it introduced some new ones:

- LOAD failures jumped to the middle of an instruction in the initialization at 03e5h, corrupting memory and/or crashing.
- The cartridge check routine assumed no RAM at 2000h and could crash if there was a 1 at that memory location.
- A very long program (approximately 16K) would push the display file to 32767 and the computer would think it was out of memory, even if a RAM pack was installed.

Reception

Timex announced the 1500 a few weeks before the Summer Computer and Electronics Show, where they showed a prototype of the 2068. Prices for the TI 99/4A and VIC-20 had dropped to under \$100 at that point.

Timex had full faith in their new computer. “We believe the many advance features of the T/S 1500 will generate enthusiastic consumer and retailer response, as did our Timex/Sinclair 1000,” said Dan Ross, vice-president of computer products.

The press and existing enthusiasts were puzzled by the 1500. Timex/Sinclair User, in their preview of the 2068, had a sidebar titled “Who Needs the Timex/Sinclair 1500?” The answers, which “took weeks to figure out,” were weak at best.

Softsync were not optimistic about the T/S 1500, since it did not have color graphics. “Six months ago, it would have been great. Now, the moment has passed. I’m not putting any hopes on it at all,” said Ken Coach, marketing and sales director of Softsync.



Wayne Green, publisher of several computing magazines, reported a “rising chorus of frustrated Timex users who are telling friends not to waste their money” on Timex computers.

Uses of the 1500

The 1500 featured in two unique products from other vendors.

National Education Corporation

The 1500 was central to the National Education Corporation’s Technical Literacy Series. They sold the 1500 with the 2020 cassette recorder, 11 tutorial booklets and a briefcase to eager learners. The kit sold for \$295.



Parker Electronics adapted the 1500 to be the user interface to a Carrier Corporation HVAC controller.



Timex/Sinclair 2000

Before Timex launched the TS 2068, they showed the TS 2000 to the press. The TS 2000 was two models: the TS 2048 (16K RAM) and TS 2072 (48K RAM).

According to David Ornstein, the “TS 2000 [used] a Z80A microprocessor running at 3.5mhz. It [contained] a few buffers, either 2 or 6 RAM chips, 2 ROMs, and ... a 64-pin custom chip.”



Timex/Sinclair 2000.

At the time, it wasn't clear if the models shown to the press were mockups or operational. In Ornstein's "Perceptions" column in the September/October 1983 issue of Sync, he stated that "I have been using the machine for about 10 months by now, 8-15 hours a day."

Timex planned suggested retail prices of \$199.95 for the TS 2072 and \$149.95 for the TS 2048.

A number of books about the TS 2068 were written before Timex launched the TS 2068 and refer to the TS 2000 instead.

BASIC

Sinclair BASIC was extended with several new keywords: STICK, SOUND, ON ERR, FREE, DELETE, RESET. The computer used bank-switched memory, allowing ROM cartridges to replace or supplement the built-in ROM.



Press photo of 2048 model.

These changes made the 2068 incompatible with most Spectrum machine-code software (virtually all commercial titles). Spectrum ROM emulation, available in cartridge and supplemental ROM form, allowed users to run the majority of software produced for the Spectrum.

Operating System

The TS 2068 features a 24K operating system that provided the BASIC interpreter, full-channelled I/O facilities, and a function dispatcher that the user could call to have both simple and complex functions performed.

Bank Switching

Bank switching, a means of expanding the computer's address space, was one of Timex's main improvements over the ZX Spectrum. The TS 2068 could theoretically access up to 256 * 64K, or 16 million bytes of memory.

Timex's bank switching addition didn't just make more RAM available: it allowed programs that ran from the cartridge to replace the main operating system or work in conjunction with it.

And, BASIC programs could be put on cartridges. This meant that BASIC programs could use almost the entire 37K of free RAM in the computer.

The downside, as has been noted in many places, is that the Timex operating system on ROM is wildly incompatible with the ZX Spectrum, thus making Spectrum ROM cartridges and other solutions necessary.

Display

The TS 2068 supports several different display options. They include:

- 32 column display
- 64 column display
- high resolution screen of 256 x 192 pixels
- high resolution screen of 512 x 192 pixels

The machine provides connections for a B&W or color TV, a composite video monitor and an RGB monitor. The last required an adapter.

Keyboard

With the TS 2068, Timex introduced a full-size keyboard with 42 hard keys, including a full-sized space bar and two shift keys, one on each side. Unlike the TS 1000, it provides real tactile feedback.

Like the TS 1000 and Spectrum, the TS 2068 keyboard allowed entry of commands and functions with one or a few keystrokes.



Dan Ross, vice-president of Timex, demonstrates the T/S 2068.

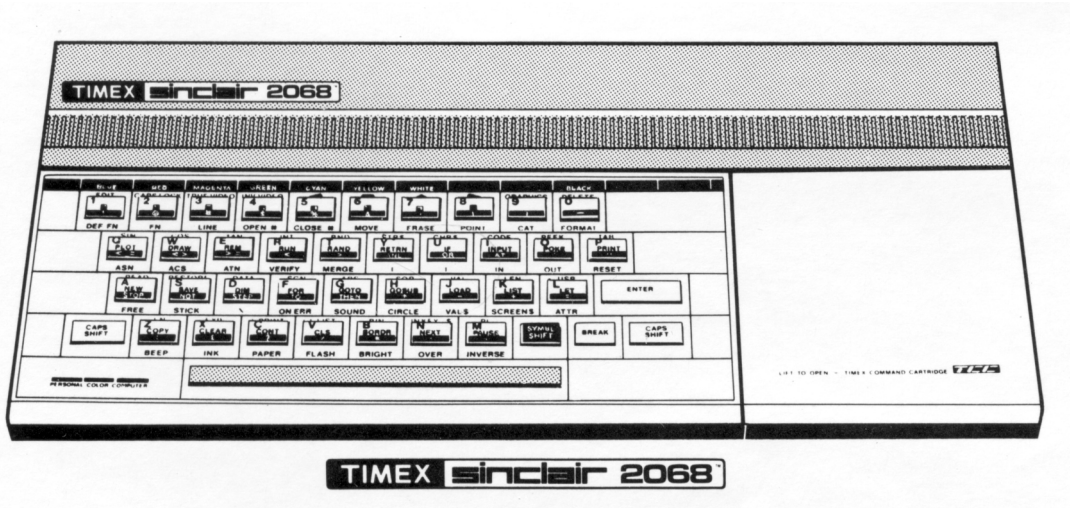


26 keys directly entered commands like PRINT, LET, LOAD, SAVE, CLEAR et cetera. The Symbol Shift key gave access to 36 symbols and statements. Shift + Symbol Shift accessed even more and Shift + Symbol Shift followed by Symbol Shift and a key accessed even more.

All told, approximately 126 commands, functions, statements, symbols and graphics were entered via just a few keystrokes.

It's debatable whether the feature was any faster than directly typing any of them. Given the way the edit window was refreshed with each keystroke, this method was a good compromise.

Like the TS 1000 before it, the computer and popular press found the keyboard noteworthy. Neil Shapiro, in an article in Popular Mechanics, referred to the keys as "chiclet" and noted that they were not "full-size typewriter key." While they were not full-size, they certainly were typewriter keys: the 2068 shared its key style with the Brother EP-20 typewriter.



Now from Timex...a powerful new computer.

72K COLOR SOUND UNDER \$200*

Timex introduces a second generation of home computers designed with one purpose in mind: to be useful. With 72K on-board memory, it's powerful enough to solve more problems in your home. Entertain you with brilliant color graphics and 8-octave sound.

Plus do word processing in addition to spread-sheet functions.

And while it does more, it does it with even greater simplicity. Its one-touch keyboard means you don't have to know typing. New Timex Command Cartridges can be used without any knowledge of programming.

Finally, A home computer you can really use in your home: the Timex Sinclair 2068.

72K on-board memory.
More memory than any computer in its class. And more memory means you can do more.

8-octave sound.
Can be used to create four sounds simultaneously over a wide frequency range.

Unique one-touch entry.
Requires no typing skills. Makes programming easier to learn.

Word processing capability.
This program provides a 64-character wide screen when used with a video monitor. An 80-column printer that provides hard copy will be available early 1984.

Sleek new compact design.
Fits easily on any desk or table.

Raised typewriter keyboard.
With full-travel keys is based on world's most popular electronic keyboard design.

Timex Command Cartridges.
Provide faster, easier program loading, take up less space.

TIMEX SINCLAIR 2068

To purchase the Timex Sinclair 2068 computer see your local dealer, or call 1-800-24-T-I-M-E-X.

* Suggested retail price

© Timex Computer Corporation, 1983

Hardware

This is where the rubber met the road for TS owners. They believed that their computers were just as capable as anyone else's and proved it in the astounding diversity of aftermarket hardware.

Many of the products here were of necessity: they overcame some inherent shortcoming in a Sinclair or Timex computer.

Some products were tiny but had a powerful impact. G. Russell Electronics' Winky Board is a good example. It made the finicky process of loading software far more reliable and consistent.

Others, like John Oliger's TMS9918A video boards for the TS 1000, extended the computer in a way the original designers never intended or imagined. In this case, the expansion added high resolution color graphics with sprites. And Fred Nachbaur rewrote portions of the Sinclair ROM to make it work seamlessly.



Disk Drive Systems and Mass Storage

Sinclair and Timex had no expectation that ZX81/TS 1000 owners would use anything other than cassette storage with their computers. Their customers had different ideas.

With the ZX Spectrum and TS 2068, both Sinclair and Timex announced a storage system. Sinclair called it the Microdrive and it used an endless tape loop to store up to 85K of programs and data. Timex announced their version of the Microdrive (the TS 2065) but it was not produced.

Mass storage systems beyond cassette tape came in two varieties: Exatron “stringy floppy” and disk drives. User demand for mass storage systems was enough that several vendors produced and sold stringy floppy or disk systems for a number of years, first for the ZX81/TS 1000 and later for the 2068.

The Exatron-based used special endless-loop cassettes called “stringy floppies.” Exatron spun its storage systems to a separate company, A&J Micro Drive. The Rotronics Wafadrive was another Exatron-based system. The A&J system was available for both the ZX81/TS 1000 and the Rotronics for the TS 2068.

Disk drive systems generally supported 5 1/4” or 3” “Shugart SA400” disk drives. The Shugart SA400 defined the interfacing standard for 5 1/4” floppy disk drives. Other disk drives, from the Hitachi 3” to 8” disk drives, used the same interface. This meant that a controller could interface to any one of those drives, a feature that some vendors noted in their advertisements.

Hardware

At least two English floppy disk controllers, from Macronics and Analogue Interface Systems, were imported and sold to ZX81/TS 1000 in the US. American vendors also produced their own floppy disk controllers.

TS 2068 users had several systems to choose from; the most popular systems were from John L. Oliger and LarKen Electronics. Zebra Systems imported the Timex Portugal produced FDD 3 and FDD-3000 systems.

In their April 1989 issue, Update Magazine reported that 238 individuals, just under half their subscribers, had a TS 2068 disk system. 47% reported having a John L. Oliger disk system, 47% LarKen LKDOS, 19% FD-68, 8% TOS (Zebra), 4% Ramex. 30% reported having dual DOS systems.

Hardware

The TS 2068 version of the A&J Micro Drive has all the features of the original and includes a Centronics printer interface.

CAI/ESF Mass Storage Device

CAI Instruments, Inc. **Price:** \$119.95 **Platforms:** TS 1000

The CAI/ESF (Exatron Stringy Floppy) used endless-loop tapes and a small operating system to perform many of the functions available on disk operating systems. It could load or store 27K bytes in less than 30 seconds.

Disk Board A

John Oliger Co. **Price:** \$66.95 **Platforms:** TS 2068

Disk drive interface that used the WD1770 drive controller. Supported up to four disk drives.

Disk Board B with NMI Save

John Oliger Co. **Price:** \$63.95 **Platforms:** TS 2068

DOS board for the Oliger system, with NMI save feature. JLO SAFE (Simple and Fast Extended) Disk BASIC is supplied on EPROM with this board. SAFE used the same syntax as cassette commands, but with a slash following the SAVE/LOAD command. Syntax for saving a BASIC program would be SAVE /"FILENAME" or SAVE /"FILENAME" LINE n.

Support up to 177 files per disk (plus a special file 0). An 80 track double-sided drive, for example, could have 795K of formatted disk space free. A 40 track double-sided drive would have 395K free space.

Compatible with Spectrum emulator/ROMswitch and the Zebra OS64 cartridge. Works with all AROS cartridges and has built-in software support for the Oliger 2068 Printer Port.

ESF Drive 2

A&J Micro Drive **Date:** 1984 **Price:** \$99.50 **Platforms:** TS 1000, TS 2068

Supplemental Exatron Stringy Floppy drive.

64K CP/M 2.2 Option

Zebra Systems, Inc. **Model:** C552 **Date:** 1986 **Price:** \$50.00 **Platforms:** TS 2068

The CP/M option for the Zebra FDD 3 gives you access to the large library of CP/M-80 business and personal software. Includes terminal emulator program which allows the TS 2068 to run CP/M in 64 column mode.

A&J Micro Drive

A&J Micro Drive **Date:** 1984 **Price:** \$149.50 **Platforms:** TS 1000

Low cost, high-speed mass storage system that uses on "wafers" (endless loop tapes). Data transfer rate is many times faster than cassette and more reliable. Loads a 28k program in 24 seconds.

Micro drive controller attaches to the expansion connector on the back and peripherals attach behind it. Most programs will run with little or no modification. Up to two drives may be connected for a maximum of 170k online storage.

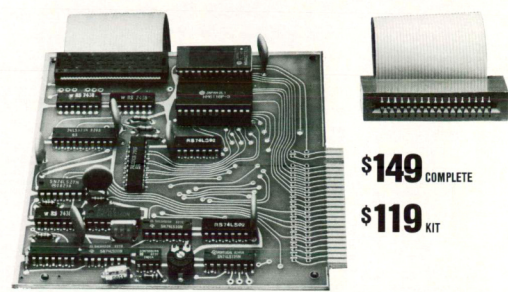
Includes drive 0, operating system, cables and power supply.



A&J Micro Drive Model 2000.

A&J Micro Drive Model 2000

A&J Micro Drive **Date:** 1985 **Price:** \$199.00 **Platforms:** TS 2068



F.I.Z Floppy Disk Interface.

F.I.Z. Floppy Disk Interface
Macronics **Date:** 1982 **Price:** \$200.00
Platforms: TS 1000

Disk drive controller with routines on ROM plus 2K RAM buffer. True random access data files supported. Compusa marketed this interface in the United States.

FD-68 INTERFACE
Controls 1-4 drives

3-8 inch Shugart Comp.

Single or double sided

40/80 tracks per side

64K RAM & 8K ROM on board

RGB monitor output

A photograph of the FD-68 Floppy Disk Interface unit. It is a rectangular metal case with a dark front panel. On the right side, there is a digital display showing '20:68'.

FD-68 Floppy Disk Interface
AERCO **Date:** 1985 **Price:** \$199.00
Platforms: TS 2068

This floppy disk system for the TS 2068 can control one to four 3" to 8" drives. Loads programs at 250k bit/sec. 64K of on-board RAM (mapped to the DOCK bank) can be used as system memory or to run CP/M. RGB output for monitor connection.



FD-ZX floppy disk interface.

FD-ZX Floppy Disk Interface

AERCO **Model:** FD-ZX **Date:** 1982
Price: \$179.00 **Platforms:** TS 1000

Supports 1-4 drives of any size, single/double density. Software driver in EPROM.

FDC-100 Floppy Disk System

Compusa Corporation **Model:** FDC-100
Date: 1983 **Price:** \$499.00 **Platforms:** TS 1000

Floppy disk controller with disk operating system in EPROM. The controller plugs into the edge connector of the computer, drawing power from the computer and has cables for interface with two floppy disk units.

The controller works with standard Shugart disk drives—single and double density, single and double sided. User interface with the control is accomplished with the Sinclair LOAD and SAVE commands by using, in place of standard file names, commands to the disk. PEEKs and POKEs are not required.

Supports both program and data storage. Program chaining, i.e., loading a self-running program from within a running program, is supported. Additionally, the DOS can LOAD data directly into, and SAVE data from a variable, providing data input/output capabilities. Program storage requires one track per program. A 35-track double-density disk will hold 35 6K programs or program segments. The DOS is memory mapped into the 12-16K region, but can be configured into locations 8-12K.

DOS commands include: INITIALIZE, DSAVE, DLOAD, NEWD, DIRECTORY, STAT, READ, WRITE, KILL, CREATE. Loads 8K program in 10 secs; saves 8K file in 20 secs, with verify.

Sold as three model numbers:

- FDC-100: interface board, cable connector and user manual.
- FDC-101: with a 40 track, single-sided, double-density (SSDD) disk drive, power

supply and case that can hold two drives.

- FDC-102: Identical to FDC-101 but with two drives.

Origin

The FDC-100 was originally developed by Analogue Information Systems, in the UK, for the ZX-81. Developers Peter Balch and Paul Cockshott worked with Compusa to adapt it for the US market.

They sold a very small number in the UK before the project was taken over by Compusa.

At the time, many floppy disc controllers used a specialized disc controller chip. To save money on the design, the read and write logic was encoded as a finite-state machine (FSM) in an EPROM. The outputs of the EPROM were connected to its address lines via a latch. The FSM could do MFM encoding, one of popular disc recording techniques.

FDD 3 add-on disk drive

Zebra Systems, Inc. **Model:** C501

Date: 1985 **Price:** \$125.00 **Platforms:** TS 2068

Add-on disk drive for the Zebra FDD 3 disk drive system.

FDD 3 Disk Drive system

Timex Portugal **Platforms:** TS 2068, TC 2068, ZX Spectrum

Four piece disk drive system designed for the TC 2068. Base system included disk controller, disk drive, system connector and twister board to convert the TS 2068 to the Spectrum bus.

The system uses 3" single-sided floppy disk drives. Each side holds 160K; the disk must be flipped to read/write the other side. The controller has a Z80 CPU, 16K RAM and two RS-232c serial ports.

Timex Operating System (TOS) loads into the controller's RAM and extends the commands built-in to the TS 2068.

TOS allows full control over disk access including saving/loading programs and random or sequential file handling of data. TOS supports an MSDOS-like tree directory structure with named diskettes, named files (8 character names plus a 3 character file extension) with attributes (protection and catalog), path names, wildcard file selection and up to 16 file or serial channels open at the same time. New commands added to Timex BASIC by TOS include: CAT*, LOAD*, SAVE*, OPEN*, PRINT*, INPUT*, LIST*, RESTORE*, MERGE*, GOTO*, GOSUB*, DRAW*, CLOSE*, FORMAT*, ERASE*, LET*, ATTR*, MOVE*.

Each unit is about 4.5" wide x 2" high x 6" deep.

FDD 3000 Disk Drive system

Timex Portugal **Date:** 1984 **Price:** \$425.00 **Platforms:** TS 2068

Power supply, FDD controller and with two disk drives in a black metal case. Same intelligent controller as original FDD 3 but with expanded internal RAM of 64K. Each drive stores 160K per side.

Zebra version included CP/M 2.2 and 64 column terminal emulator program for the TS 2068.

Produced by Timex Computers, Portugal, sold in Portugal and Poland and imported to the United States.

FDD-3000 Spectrum Mode Option

Zebra Systems, Inc. **Model:** C553

Date: 1986 **Platforms:** TS 2068

Option for those who wish to run Spectrum software with the FDD 3000. Allows you to LOAD, SAVE and RUN Spectrum software from FDD 3000.

Floppy Disc Controller

Audio Vision **Date:** 1983 **Price:** \$99.00
Platforms: TS 1000

For Shugart compatible drives.

Hardware

Floppy Disk Interface

Compusa Corporation **Date:** 1983
Price: \$149.95 **Platforms:** TS 1000

Actually the Macronics F.I.Z. DOS is in EPROM. Compatible with RAM packs. DOS commands include: INITIALIZE, DSAVE, DLOAD, NEWD, DIRECTORY, STAT, READ, WRITE, KILL, CREATE. Loads 8K program in 10 secs; saves 8K file in 20 secs, with verify.

Floppy Disk Interface

Sinclair Place **Date:** 1983 **Price:** \$115.00 **Platforms:** TS 1000
Controller for standard floppy disks. Stores 43K per disk. Manufactured by Indescomp.

Floppy Drive Interface

Research Service Labs **Date:** 1985
Price: \$190.00 **Platforms:** TS 2068

LarKen Disk System

LARKEN Electronics **Model:** DSK-400
Date: 1986 **Price:** \$120.00 **Platforms:** TS 2068
Floppy disk interface, LKDOS cartridge, operating manual and LKDOS utilities disk. Can support up to four 3" to 5.25" single-sided, double-sided or quad density disk drives.

NMI snapshot button and Kempston joystick port on the disk interface.

LarKen ZX81 Disk System

LARKEN Electronics **Platforms:** TS 1000
Floppy disk interface for ZX81/TS 1000.

LKDOS/Extended BASIC Cartridge

LARKEN Electronics **Date:** 1988 **Price:** \$65.00 **Platforms:** TS 2068
Contains LarKen DOS with 8K ROM and 8K RAM on the cartridge. Used to control LarKen DSK-400 or other disk interfaces.

All LKDOS or extended BASIC commands use the PRINT #4: syntax. Support for all Timex DOS commands.

Extended basic commands include CIRCLE, windows, box clear and fill, channel support for devices, variations of POKE, PAPER, INK and CLEAR.

Fully compatible with OS-64, Spectrum and other cartridges. Versions for Oliger and RAMEX disk systems.

Memotech Disk Drive

Memotech **Platforms:** TS 1000
Vaporware announced in the Sync v3 n1 advertisement.

Microdrives

E. Arthur Brown Company **Date:** 1984
Platforms: TS 2068
Vendor promised Timex microdrives before learning the 2068 was not compatible with the Spectrum.

Millenia K Disc Drive

RAMEX International **Date:** 1984
Price: \$200.00 **Platforms:** TS 2068
Disk drive system for the TS 2068 with SP-DOS.

- Stores 800k on one disk
- Loads 32K in one second
- Mini-DOS uses 4K RAM, full DOS uses 7.6K
- Supports Tasword, Tasmerge, Masterfile, Omnicalc II, Disc Pascal, C compiler

Rotronics Wafadrive

DAMCO Enterprises **Date:** 1984 **Price:** \$229.95 **Platforms:** TS 2068
Manufactured by BSR, the Wafadrive used an improved version of the Exatron stringy floppy drive.

The Wafadrive included two continuous loop “stringy floppy” tape drives, an RS-232 interface and Centronics parallel port.

Hardware

Designed for the ZX Spectrum, this device requires twister board to work with the TS 2068.

TS 2065 Microdrive

Timex Computer Corporation **Model:** TS 2065 **Date:** 1984 **Price:** \$65.00
Platforms: TS 2068
The TS 2065 Microdrive was to be Timex’s variant of the Sinclair ZX Microdrive. The Microdrive read and wrote to special tape cartridges, each holding 20 feet of tape in a continuous loop and storing about 85K bytes of data. The tape runs at 30 inches per second, so the entire loop passes in 8 seconds.

The Microdrive system was to support both program and data files using the built-in commands CAT, ERASE, FORMAT, OPEN, etc.


Timex displayed this product at the 1984 Consumer Electronics Show in Las Vegas.



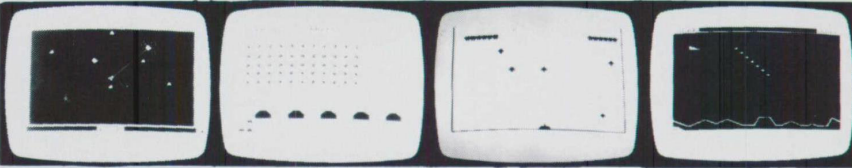
The DK Graphic module is our latest ZX81 accessory. This module, unlike most other accessories fits neatly inside your computer under the keyboard. The module comes ready built, fully tested and complete with a 4K graphic ROM. This will give you an unbelievable 448 extra pre-programmed graphics, your normal graphic set contains only 64. This means that you now have 512 graphics and with their inverse 1024. This now turns the 81 into a very powerful computer, with a graphic set rarely found on larger more expensive machines. In the ROM are lower case letters, bombs, bullets, rockets, tanks, a complete set of invaders graphics and that only accounts for about 50 of them, there are still about 400 left (that may give you an idea as to the scope of the new ROM). However, the module does not finish there: it also has a spare holder on the board which will accept a further 4K of ROM/RAM. This holder can be fitted with a 1K/2K/RAM and can be used for user definable graphics so you can create your own custom character sets.

\$53.91

4K Graphics rom



SOME OF THE GRAPHICS NOW POSSIBLE ON THE ZX81



★ ASTEROIDS ★ SPACE INVADERS ★ CENTIPEDE ★ DEFENDER

16K GRAPHICS ROM SOFTWARE

\$8.91

Graphics

One of the most notable shortcomings of the ZX80, ZX81, TS 1000 and TS 1500 was the black-and-white, low resolution graphics. A number of solutions were available.

One popular solution extended the graphic capabilities by adding pre-programmed or user-programmable characters. This intermediate solution allowed for more complex or interesting displays within the native resolution constraints of the TS 1000.

Other solutions increased the native resolution up to 256×192 pixels, allowing TS 1000 users to program at a resolution on par with many home computer, albeit in black and white.

In all, these products improved the graphic ability of the computer without altering the physical video output method: a composite modulated video signal for one’s TV.

256x192 Bit Mapped Hi Res Graphics

Advanced Interface Designs **Date:** 1982 **Price:** \$5.00 **Platforms:** ZX81, TS 1000
Plans to build a high resolution graphics module.

4K High Resolution Graphics ROM

DK'tronics **Date:** 1982 **Price:** \$53.91 **Platforms:** TS 1000
Gives 448 extra pre-programmed graphics symbols. The ROM contains lower-case letters, bombs, bullets, rockets, tanks, a complete set of invaders graphics and more.

The board also has a spare socket that will accept another 4K of ROM, like the 4K TOOLKIT ROM or 1K/2K RAM, for user-defined graphics.

dk'Tronics and Kayde published several games that required this ROM:

- Asteroids (dk'Tronics)
- Centipede (Kayde)
- Defender (dk'Tronics)
- Peckman (Kayde)
- Space Invaders (Kayde)

Technical

The 4K EPROM is mapped to 2000h-2FFFh, with seven new character sets (of 64 symbols each). 2E00h-2FFFh is mainly filled with FFh and contains a few USR functions for selecting the new character sets. The board can be fitted with 1K or 2K static RAM, or 4K EPROM (mapped to 3000h-3xFFh).

Only 64 symbols can be used at once, preventing display of lower-case letters and numeric digits. Many symbols (like A-Z) are duplicated in several 64-character banks, which is why it claims 448 extra symbols (vs the 512 that could be available).

Kayde 4K ROM

Kayde's variant is a possibly unlicensed clone of the dk'Tronics board. With the exception of a few cosmetic differences to the circuit and replacement of some inverse characters with Pac-Man symbols, it is otherwise identical.

Blinking Cursor Module

Kaltek Calculator Technology **Model:** BC-80 **Date:** 1983 **Price:** \$17.46 **Platforms:** ZX80
Causes normal and syntax characters, plus various graphics, to blink.

Color Board

Haven Hardware **Price:** \$60.00 **Platforms:** ZX80
Program each character square in one of 16 colors. Each character can be defined for high resolution graphics.

CX81 Graphics Module

Zodex **Price:** \$89.95 **Platforms:** TS 1000
Create your own unique character set. Up to 32 characters for creating game pieces, musical notation, foreign alphabet.

Full animated graphics for ZX80

Comp Shop, Ltd. **Price:** \$19.50 **Platforms:** ZX80
Kit, no screen flicker.

Graphics Generator

EPROM Services **Date:** 1983 **Price:** \$39.00 **Platforms:** TS 1000
Peripheral enabling alternate character sets to be used and printed either from EPROM or user-defined character sets in RAM. 4K of EPROM is supplied containing 4 character sets and routines to print, copy, LPRINT and switch between character sets. A further 2 x 2K of RAM or EPROM can be added.

Hardware

Grif Graf

Rave Research **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000
Programmable graphics generator. Fits inside computer.

Hi Res Graphics Plans

G. Russell Electronics **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Plans for building 256x192 addition for hi-res display.

High Resolution Graphics

Notting Dale Technology Centre **Date:** 1983 **Price:** \$60.00 **Platforms:** TS 1000
256x192 graphics, 114 plot modes; mixed text and graphics including PRINT AT. User defined graphics. Modes include points and line types, textured triangle fill, absolute and relative coordinates, line drawing to points off screen.

Memopak HRG (High Resolution Graphics)

Memotech **Date:** 1982 **Price:** \$149.95 **Platforms:** TS 1000
Full programmable high resolution (192 x 248 pixels) graphics module. Enables “arcade game” style graphics through resident 2K EPROM, programmed with a full range of graphics subroutines. Video page is both memory and bit mapped and can reside anywhere in RAM. Display file takes about 6.5K RAM.

Programmable Character Generator

Haven Hardware **Price:** \$33.75 **Platforms:** ZX80, TS 1000
Standard letters; inverse characters may be mixed or interchanged with 2 sets of programmable characters. 8x8 matrix. Written by 8 POKE commands. Occupies 1E00h-1FFFh region of BASIC ROM.

QS CHR5 Board

Quicksilver **Date:** 1982 **Price:** \$40.00 **Platforms:** TS 1000
Character generator giving 128 separately programmable characters. 1K on board RAM. Enables creation and display of your own characters to screen or printer.

Maps 1K RAM to 8400h-87FFh, allowing for 128 custom characters (64 normal and 64 inverted characters). Each character can be individually defined.

The RAM contained random data at power-up, resulting in a garbled display. The board has a switch to manually enable/disable the CHR5 feature, allowing the user to boot with standard Sinclair characters, load the RAM with character definitions and switch to custom characters.

Sinclair Place imported versions manufactured by Indescomp.

QS HI-RES Board

Quicksilver **Date:** 1982 **Price:** \$30.00 **Platforms:** TS 1000
High resolution graphics board giving 256x192 pixels. 2K ROM, 6K RAM on board. Software select/deselect. Mixed text and graphics. Resident machine code graphics software provides these commands: MOVE x,y; PLOT x,y; DRAW x,y; PRINT X\$; COPY; BLACK; WHITE; CLEAR.

RAM/EPROM Option for ZX-G

Southern Computer Systems **Date:** 1982 **Price:** \$79.95 **Platforms:** TS 1000
32K RAM and four 2716 EPROMs. ZX-G required.

Slow/Fast kit for ZX80 with 8K ROM

Computer Engineering Services (The Jarrett Company) **Date:** 1982 **Price:** \$32.50 **Platforms:** ZX80
FAST and SLOW modes on ZX80 with 8K ROM. PCB with complete instructions

Hardware

and parts list. PCB will work with new ROMs if installed properly.

Spyder Character Board

Spyder Electronics **Date:** 1983 **Price:** \$29.50 **Platforms:** TS 1000
A 4K (2K populated) memory expansion that allows changing of the ZX81/TS 1000 character set in the region between 12 and 16K. May be populated with 6116 RAM or 2716 EPROMs.

Userfont

BASICare Microsystems, Inc. **Date:** 1983 **Price:** \$13.95 **Platforms:** TS 1000
User defined characters for use with DROM or RAM 08. Define a set of 128 characters. Characters can be stored in EPROM by using TOOLKIT.

A module in the BASICare Modular Expansion System.

Video upgrade board

MicroAce **Date:** 1981 **Price:** \$29.50 **Platforms:** MicroAce
Flicker-free display. 8K ROM required.

ZX-G Expansion Unit

Southern Computer Systems **Date:** 1982 **Price:** \$99.95 **Platforms:** TS 1000
High resolution hardware unit with 48K RAM. Allow for creating memory-mapped images at 256x192 pixels. Graphics can be

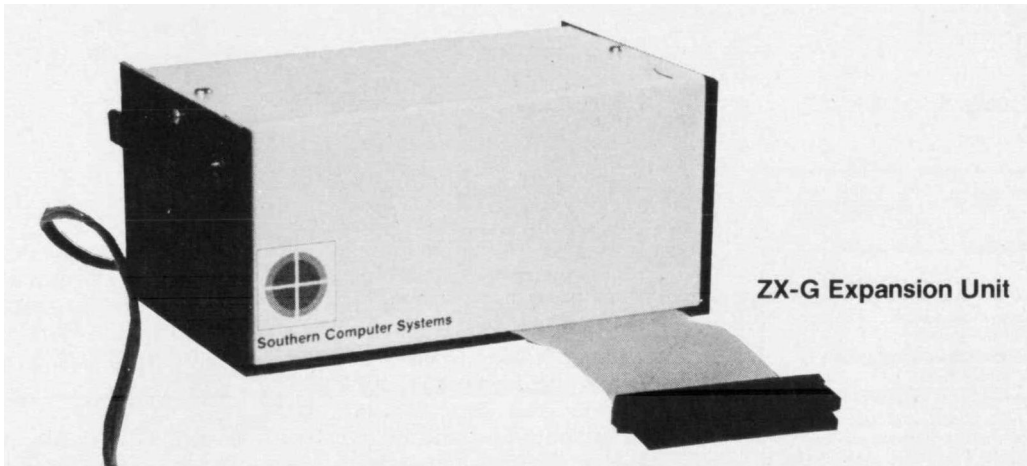
drawn, moved, rotated, mixed with text, saved on cassette or printed. Software on cassette supports drawing lines, circles and rectangles. Four high resolution screens can be stored in addition to 16K program.

May have been later sold by Minny Electronics as the ZX-GR. Includes own power supply. EPROM programmer optional.

ZX-GR Expansion Unit

Minny Electronic Inc **Date:** 1984 **Price:** \$149.95 **Platforms:** TS 1000
High resolution hardware unit with 64K RAM (56K usable). Create memory-mapped images at 256x192 pixels. Graphics can be drawn, moved, rotated, mixed with text, saved on cassette or printed. 32x32 pixel sprites, 5 graphic planes. Software on cassette supports drawing lines, circles and rectangles. Four high resolution screens can be stored in addition to 16K program.

Appears to be an improvement of the Southern Computer ZX-G expansion unit. Sold as MMY-REZ by E. Arthur Brown Company.



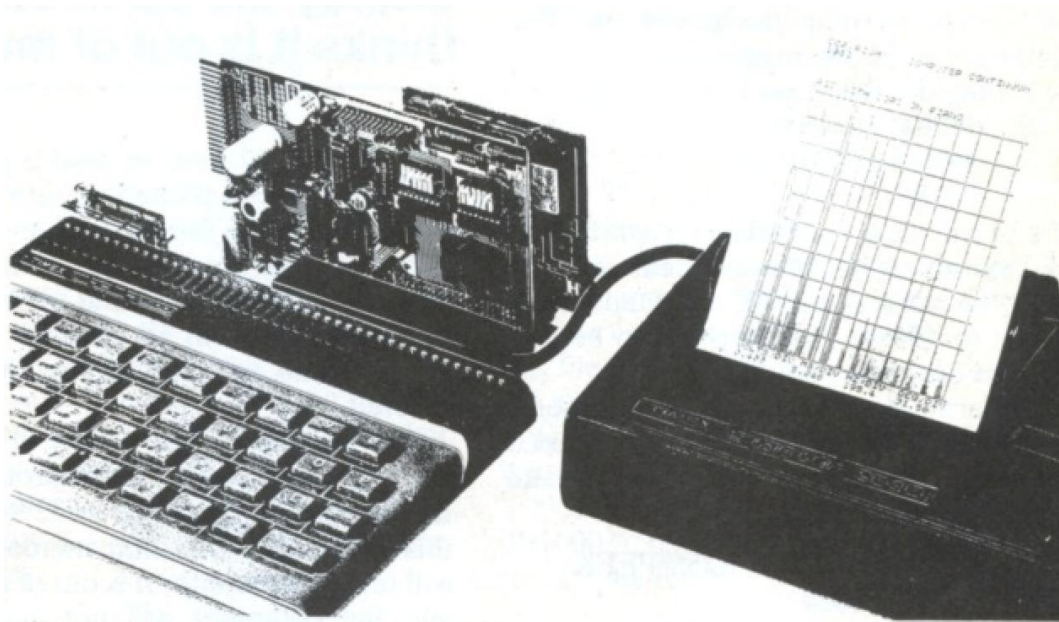
Hardware

ZX81 High Resolution Graphics Pack

Digital Integration **Date:** 1983 **Price:** \$45.00 **Platforms:** TS 1000

Fully programmable 256 x 192 pixel high-resolution display. Hi-Res-BASIC monitor in 2K EPROM includes PAGE, PRINT, PLOT, (inc. LINE), SCROLL, INV, CLS, COPY. Includes lower case character set for word processing. Full dynamic control of user-definable graphics. Fits between ZX81 and RAM pack. 16K.

Hardware



Computer Continuum analog interface board with TS 1500 and printer.

Interfacing

The dream of the 1980s, it seemed, was for your home computer to control all aspects of one’s home. Turn on the lights, control the furnace, adjust the window shades; the possibilities were endless.

Hence, the multitude of interfacing products.

Sinclair and Timex computers made for excellent research computers because they were so cheap. And coupled with many of the interfacing products listed here, they could be turned into lab instruments with reasonable ease.

They also made excellent “brains” for home-brew robotics projects. One vendor wrote a book about his robot project and sold products to help others build their own.

16-line Programmable I/O Port

Thurnall Electronics **Model:** TE10
Date: 1982 **Price:** \$34.00 **Platforms:** TS 1000

Interface to one Thurnall device. Uses Zilog PIO. Fully decoded, so it doesn't conflict with other devices. Interfacing to more than one device requires the Thurnall motherboard.

2068 Expansion Board

John Oliger Co. **Price:** \$54.95 **Platforms:** TS 2068

Compact expansion board plugs into the rear expansion connector of 2068 computer, provides slots for Oliger expansion boards. Board includes one "spare" 20 pin IC socket for a user circuit, a rear edge connector feed through for attaching the 2040 printer, modem, etc., and the necessary circuitry for a RGB monitor interface. RGB circuit requires cutting a trace and installing a jumper in the 2068.

24 Line I/O Port

Redditch Electronics **Date:** 1981 **Price:** \$24.00 **Platforms:** TS 1000

Controlled using BASIC, with suitable interface circuits will control LEDs, motors, relays, lights, sound generators.

3 Port I/O board

Professional Electronics **Date:** 1982 **Price:** \$50.00 **Platforms:** ZX80, TS 1000

Programmable 8255 PIA. Space for analog-to-digital converter, relays, clock chip, etc. Expansion connector for RAM pack.

310 I/O port with real time clock

JK Audio **Price:** \$49.95 **Platforms:** TS 1000

I/O board with our real time clock/calendar.

- 8 outputs capable of driving relays
- 8 TTL inputs

- Feed-through Sinclair bus connector to allow normal expansion
- Battery back-up for clock
- Expandable ports

315 Bare PCB I/O, real time clock board

JK Audio **Price:** \$24.95 **Platforms:** TS 1000

317 Clock IC and crystal

JK Audio **Price:** \$12.95 **Platforms:** TS 1000

320 A to D and D to A converter

JK Audio **Date:** 1982 **Price:** \$39.95 **Platforms:** TS 1000

325 Bare PCB of A/D, D/A

JK Audio **Price:** \$19.95 **Platforms:** TS 1000

330 Wireless control system

JK Audio **Date:** 1982 **Price:** \$44.95 **Platforms:** TS 1000

340 Solid State AC switch

JK Audio **Price:** \$19.95 **Platforms:** TS 1000

350 Relay board

JK Audio **Date:** 1982 **Price:** \$69.95 **Platforms:** TS 1000

4 Port I/O

Sigma Technology **Date:** 1983 **Price:** \$69.95 **Platforms:** TS 1000

Kit, plugs into ST-50 buffered motherboard.

4-channel Relay Box

Thurnall Electronics **Model:** TE12
Date: 1982 **Price:** \$27.00 **Platforms:** TS 1000

Use with Thurnall I/O board to switch low-current household equipment.

Hardware

8-way Indicator Unit

Thurnall Electronics **Model:** TE17
Date: 1982 **Price:** \$24.00 **Platforms:** TS 1000
8 LED output; displays binary equivalent of the data on one port of the Thurnall I/O board.

8-way Switch Unit

Thurnall Electronics **Model:** TE18
Date: 1982 **Price:** \$24.00 **Platforms:** TS 1000
Provides a byte-wide input interface to the Thurnall I/O board.

8-way Transistor Driver

Thurnall Electronics **Model:** TE15
Date: 1982 **Price:** \$18.00 **Platforms:** TS 1000
Use with Thurnall I/O board to switch low voltage devices.

A-D Converter

User Friendly Research **Date:** 1983
Price: \$49.95 **Platforms:** TS 1000
8 channels, 256 level analog-to-digital converter. Can be used with Atari paddles.

A/D Converter Board

Mikro-Gen **Price:** \$36.95 **Platforms:** TS 1000
Four channel analog-to-digital conversion board. Connect analog joysticks or other A/D uses. Supports the Mikro-Gen analog joysticks and games that use them.

A/D-D/A Expansion Board

Micro Developments **Date:** 1983 **Price:** \$89.00 **Platforms:** TS 1000
Provides two channels of ADC and two channels of DAC. 8-bit resolution is obtained in 100 microseconds.

The I/O command requires a single line of PEEK or POKE. Sample programs are provided and simple applications are suggested, e.g., temperature measurements and an interactive servo circuit. Programs are also provided which show the user how to archive and plot data.

The quoted specifications (5V and 1/256 resolution) are nominal and include no manufacturing or device tolerance. Performance of these devices adequate for applications requiring one percent precision and they may be calibrated to this accuracy.

Analog Interface Board

Computer Continuum **Date:** 1982
Price: \$230.00 **Platforms:** ZX81, TS 1000, TS 1500
8 channels each of A/D and D/A. Up to 200K samples per second, 1.6 microsecond A/D conversion time, 100ns acquisition window. 1 microsecond D/A time, 8 bits, 0-5V or 0-2.5V full scales. Board allows rearrangement of the pins and other features for easy interfacing to many types of host computers, including Sinclair, Apple, TRS80, others. Switches set address. Address selects channel.

Analog-Digital Module

Byte-Back Co **Model:** PT101 **Date:** 1985 **Price:** \$29.95 **Platforms:** TS 1000, TS 2068
With the addition of the A-D module, the BB-1 or BB-68 can read analog signals. The A-D is a single channel successive approximation device. It can read an analog signal on 5 different scales: <0 to .25v, 0 to .50v, 0 to 2.75v, 0 to 5.00v and 0 to 10.0v.

ASZMIC External Card

Comprocsys, Ltd **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000
Features socket for ASZMIC ROM, socket for additional 4K/8K EPROM or RAM, 24 programmable I/O lines (8255) and EPROM programming socket. Allows for switching between Sinclair and ASZMIC ROMs.

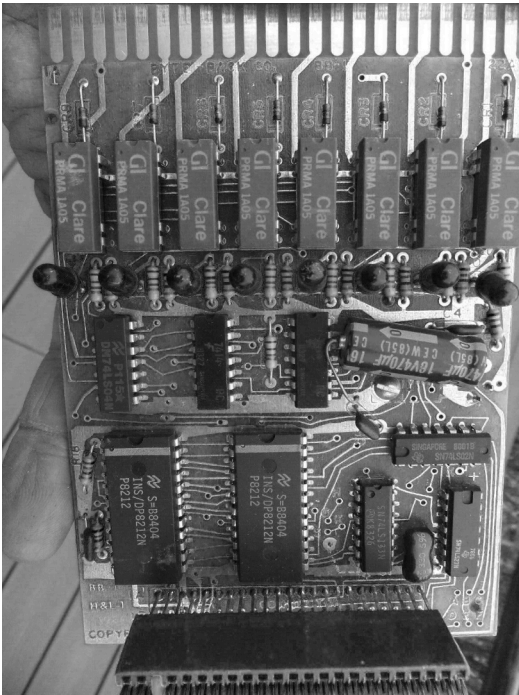
BB-1 Control Module

Byte-Back Co **Model:** BB-1 **Price:** \$69.00 **Platforms:** ZX80, ZX81
8 independent relays with LED status indicators and 8 TTL inputs with Schmitt trigger buffers. Single POKE to change/latch each relay. Read all 8 inputs in a sin-

Hardware

gle PEEK. More than one BB-1 can be attached to the computer.

- The BB-1 was used for:
- automated fireworks display
 - a high school experiment aboard the Space Shuttle
 - greenhouses, model railroads, robots
 - slide projections with audio
 - solar heating
 - unattended time-lapse photography
 - a wheelchair for a quadriplegics
 - make animated films
 - monitor laboratory conditions
 - read punch cards and tape
 - teach digital and analog electronics



Byte-Back BB-1.

BB-68 Controller

Byte-Back Co **Model:** BB-68 **Date:** 1985 **Price:** \$69.00 **Platforms:** TS 2068
8 independent relays with LED status indicators and 8 TTL inputs with Schmitt trigger buffers. Single POKE to change/latch each relay. Read all 8 inputs in a sin-

gle PEEK. More than one BB-1 can be attached to the computer.

Beeper, Clock, Switch Board

Micro Developments **Date:** 1983 **Price:** \$89.00 **Platforms:** TS 1000
Timer/clock, beeper and switch input interface.

The clock is a 15 bit stopwatch and uses 2 of the 16 bytes available on the I/O board. It has a resistor/capacitor time base, can be switched for 0.1 or 1.0 second intervals.

An independent beeper is on the board and an extra output bit is available to output a logic signal.

Inputs are provided for a manual switch which can be sensed by the computer or any computer function.

Sample programs are included to introduce the user to these features, e g., a program to translate keyboard input into Morse code (can be output on the beeper).

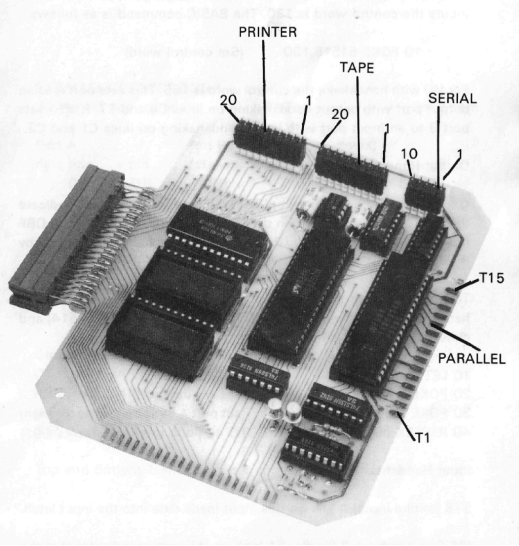
Buffered Bus Expansion Board

Computer Continuum **Date:** 1982
Price: \$34.00 **Platforms:** ZX80, ZX81
This motherboard provides four 44-pin card connectors, room for wire wrap and voltage regulator. Eight chips are needed, five for buffers and three for decoding bi-directional data bus buffers.

Budget Robotics & Computing purchased the rights to make and sell the Computer Continuum board in 1984.

Buss

Synchronize **Date:** 1982 **Price:** \$3.50 **Platforms:** TS 1000
Plans for inexpensive expansion system.



CAI/O Board

CAI Instruments, Inc. **Price:** \$79.95
Platforms: TS 1000
Main interface. RS232, 3 ports parallel IO, printer port, tape port, memory expansion port. Replaced "Widget".

Chip Tester and Logic Monitor
Zunk Custom Electronics **Date:** 1988
Price: \$45.00 **Platforms:** TS 2068

Adapted to the TS 2068 from Build IC Tester: An Accessory For Your Commodore 64 in the May 1988 issue of Radio Electronics. Uses the Z80 PIO. Makes an 8 trace, dual screen, digital storage oscilloscope that runs as fast as the computer. The board plugs in the cartridge port and requires an internal modification to the 2068 to put the Z80 clock signal on the cartridge connector.

Compu-Board

Compu-Pak **Date:** 1983 **Price:** \$99.95
Platforms: TS 1000
Converts the TS 1000 into a complete home computer system. Applications include memory expansion, A/D D/A, wireless thermostat and security system, EPROM programmer, music and speech synthesis, etc. Provides fully buffered lines with status indicators. Six expansion slots.

Cyberanimation 1500 Kit
Cyberanimation, Inc. **Date:** 1984 **Price:** \$69.95 **Platforms:** TS 1000
Vision kit is a linear 1x15 pixel array, electronics, LED video display and PC board. Includes sample programs to run the vision electronics.



Data Acquisition Module
Occam Research, Inc. **Model:** 2900-Z
Date: 1983 **Price:** \$89.00 **Platforms:** TS 1000
For general purpose measurement 14 channels of analog input; simple interface to Sinclair BASIC. Individually software configured channels, allowing any mixture of temperature, voltage, current, resistance, or frequency measurements. Integrating A/D converter allows trade measurement accuracy and noise rejection for conversion time. Maximum resolution: 200 microvolts DC, 0.05 degrees F. English language control over all aspects of the process. Internal ROM.

DCP Interspec Pack
DCP Microdevelopments Ltd. **Date:** 1983 **Price:** \$90.00 **Platforms:** TS 1000, TS 2068, ZX Spectrum
8 bit, 8 channel A-D converter, 4 relays, 4 switch inputs, 8 bit input port and 8 bit output port. DCP bus at rear of unit for other add-ons. Complete interface pack for ZX81 or Spectrum.

DCP P/A/C Packs
DCP Microdevelopments Ltd. **Date:** 1983 **Price:** \$30.00 **Platforms:** TS 1000
A set of packs giving ZX81 memory, control and analog interfaces. The P-Pack

plugs gives 4K of CMOS RAM plus I/O Port. The analog pack or control pack onto the rear of the P-Pack.

Designer's Dream Interface
RAM **Date:** 1983 **Price:** \$34.95 **Platforms:** TS 1000

Provides connection for peripheral devices and RAM pack. Includes card edge connector, interface board, plated 50 pin strip header and 12" 50 wire ribbon cable with socket connectors.

DFh Mapped Universal I/O Port
John Oliger Co. **Date:** 1994 **Platforms:** TS 2068

Digital to Analog Converter
Redditch Electronics **Date:** 1983 **Price:** \$45.00 **Platforms:** TS 1000
Fits onto input/output port to give one analog output (0 to 2.55 volts); space on board for two extra converters.

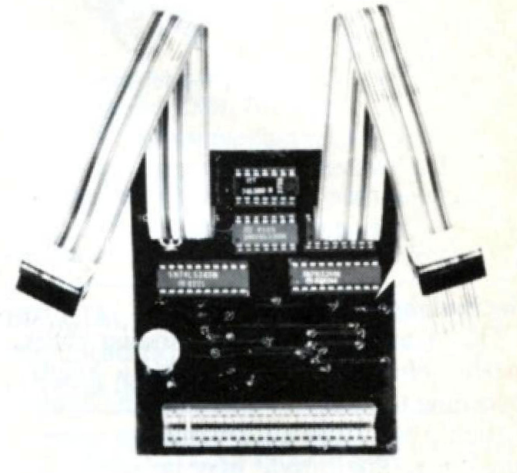
Edge Connector
Synchronize **Date:** 1982 **Platforms:** TS 1000
Many vendors sold ZX80/ZX81/TS 1000 compatible edge connectors in solder-tail and wire-wrap versions. The wire-wrap connector could be used with a small printed circuit board to build a feed-through device that would allow for connecting another expansion unit.

Expansion Board
John Oliger Co. **Date:** 1982 **Price:** \$43.95 **Platforms:** TS 1000
4 or 6 slot expansion board for use with Oliger projects for the ZX81/TS 1000.

FD-ZX1 Interface Board
Group Technology Ltd **Date:** 1983 **Price:** \$99.95 **Platforms:** TS 1000
Turn the Timex-Sinclair into an automated measurement, data acquisition and control instrument. Fully buffered address, data, and control buses for I/O; 6 decoded device codes; 2 14-conductor, 6" cables to

connect interface to other boards. A number of science experiments have been developed to aid teachers in illustrating scientific principles.

High Speed Interface



Interface Design Model: HS-1 **Date:** 1984 **Price:** \$78.00 **Platforms:** TS 1000
Connect the HS-1 interface to a spare TS 1000 to create a computing system that is quick and responsive. Fast mode flicker no longer occurs when entering program lines and data.

System used direct memory access to copy the display file from a fast mode computer to a slow mode TS 1000, which then produces the display. Vendor claimed a speed gain of 5.5 times faster than a single computer in slow mode.

I/O Board
EPROM Services **Date:** 1983 **Price:** \$25.00 **Platforms:** TS 1000
32 line I/O board. Ports mapped to 4 absolute locations. Port A has 8 LED indicators. Port B has 8 outputs. Splits into 2 ways each so one instruction can be used to switch between two peripherals. Port C is uncommitted. A status indicator gives a 16 LED indicator of the state of Port B. A precision D/A board fits Port C.

Hardware

I/O Board

ELCOMP Publishing, Inc. **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 2068, ZX Spectrum

Designed for the Spectrum owner who wants to do I/O circuit design. 8 bit port; large prototyping area; description and application information on how to build multi-channel sound generator.

I/O Expansion Port

Micro Developments **Date:** 1983 **Price:** \$89.00 **Platforms:** TS 1000

Provides a buffered bus that decodes the address lines and inhibits the internal 1K RAM (and external 16K RAM) when I/O is selected. Up to 8 byte-wide ports. Connects to the ZX-81 via a custom cable.

I/O Ports and EPROM Programmer Plans

Upstate Labs **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

Schematic, documentation and software listing for 24 line input/output port that can be used to program 2716, 2732 and 2764 EPROMs.

I/O Unit

Wisconsinc Electronics **Date:** 1982 **Price:** \$99.00 **Platforms:** TS 1000

Expansion module with 6 input/output ports (24 input and 24 output lines) and 4 sockets for 2K memories. Save USR programs in 2716 EPROM for ready access or use static RAMs.

Intercontroller

Intercomputer, Inc. **Model:** PL7013B **Date:** 1983 **Price:** \$99.95 **Platforms:** TS 1000

Fully programmable controller for home, office, lab and workshop with four power sockets. Turn on/off lights, motors, etc. Software programmable with time intervals from fractions of seconds to days. Connect up to four Intercontroller units to the computer with a Softbox. Uses memory addresses 8192-8195.

IOC24

GCM Electronics, Inc. **Date:** 1983 **Price:** \$189.95 **Platforms:** TS 1000

Versatile interfacing board that included:

- 12 unbuffered TTL digital I/O lines
- 8 unbuffered analog inputs (0-5v)
- 8-bit analog to digital converter
- LED status indicators
- Clock/calendar
- Buffered digital outputs (500 ma)
- TRIAC outputs, 400v 2 amp zero-crossing optically isolated (IOC 24-4 has 4 TRIAC outputs, IOC 24-12 has 12 TRIAC outputs)
- Regulated 5v power supply

Kradle Manipulator

K-2 Electronics **Date:** 1984 **Platforms:** TS 1000

Parallel digital input/output (16 lines) expansion option for Kradle. Adaptable to parallel printer port.

Memory board with I/O

Wisconsinc Electronics **Model:** T1000 **Price:** \$134.00 **Platforms:** TS 1000

16K or 32K and two 8-bit LS TTL input ports and two 8-bit latching output ports.

Motherboard

Redditch Electronics **Date:** 1982 **Price:** \$40.00 **Platforms:** ZX80, TS 1000

Plugs into the back of ZX81 or ZX80. Printer/RAM pack plugs onto back. Has two female connectors to accept expansion boards.

Motherboard

Thurnall Electronics **Model:** TE30 **Date:** 1982 **Price:** \$30.00 **Platforms:** TS 1000

Expansion board for use with other Thurnall modules. Required to connect more than one device to the I/O board; connect up to four Thurnall modules.

Parallel I/O port

Haven Hardware **Price:** \$25.00 **Platforms:** ZX80

Interface computer to the real world.

Parallel User I/O

Kempston Micro Electronics **Date:** 1982 **Price:** \$25.00 **Platforms:** TS 1000

Sixteen input/output lines to drive lights, relays, motors.

PERICONa

BASICare Microsystems, Inc. **Model:** B27 **Date:** 1983 **Price:** \$54.95 **Platforms:** TS 1000

General purpose, user-programmable 24 lines of input/output. Up to 4 PERICONa can be used together. Up to four can be used simultaneously allowing basic I/O, strobed I/O, and bidirectional 8 bit data transfer with handshakes.

A module in the BASICare Modular Expansion System.

PERICONb

BASICare Microsystems, Inc. **Model:** B28 **Date:** 1983 **Price:** \$59.95 **Platforms:** TS 1000

24 lines of heavy duty output to access and control the outside world. Lines are capable of operating relays or driving long signal lines. Up to 4 can be used.

A module in the BASICare Modular Expansion System.

Poly Port

Rave Research **Date:** 1983 **Price:** \$49.95 **Platforms:** TS 1000

6 I/O ports useful for many applications. 3 ports can be used for vendor's "Polyphonic System" musical synthesizer. Depending on application, an output connector or cable may be needed.

Hardware

PROM Burner Development System

RAm **Date:** 1983 **Price:** \$99.95 **Platforms:** TS 1000

Interface board for programming EPROMs. Includes two I/O ports, access to 8K of executable memory and tools for duplicating, revising and verifying EPROMs. In 1984, it was marketed as a solid state "Disk Drive."

Prototyping Board

Zebra Systems, Inc. **Model:** C211 **Date:** 1984 **Price:** \$10.95 **Platforms:** TS 2068

Printed circuit board designed for prototyping circuits with the TS 2068.

Prototyping Board

Zebra Systems, Inc. **Model:** C111 **Date:** 1983 **Price:** \$9.95 **Platforms:** ZX81, TS 1000

Printed circuit board designed for prototyping circuits with the ZX81/TS 1000.

PTX-I/O

Powertronix Electronics **Date:** 1982 **Price:** \$45.95 **Platforms:** TS 1000

Expandable 0 to 16 port input/output system.

QS Motherboard

Quicksilva **Date:** 1981 **Price:** \$20.00 **Platforms:** ZX80, ZX81, TS 1000

Allows for connecting 16K RAM pack, QS Sound Board and another board.

RAMPOR

Componedex Ltd. **Date:** 1982 **Platforms:** TS 1000

Integrated expansion system. Analog, digital I/O ports and 16K RAM expansion on one card.

RC-103 Analog Interface

Kaltek Calculator Technology **Platforms:** TS 1000

Supports a variety of applications including LOAD signal conditioner, ohm meter, capacitance meter, signal conditioner, tachometer, thermometer and more.

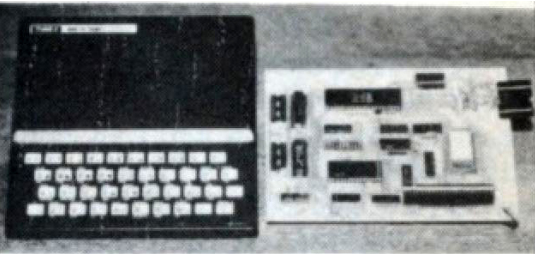
Hardware

RD 8100 System

RD Laboratories **Date:** 1982 **Price:** \$54.00 **Platforms:** ZX80, TS 1000
Modular interface system to permit real-time application of the ZX80/81. Connected by motherboard; 5 modules available.

Remote Control

Audio Vision **Date:** 1983 **Price:** \$89.00 **Platforms:** TS 1000
16 channel input/output. Wireless (infrared) transmitter/receiver option.



Report Generator

Ener-Z **Date:** 1983 **Price:** \$69.95 **Platforms:** TS 1000
Data acquisition and control module with Centronics printer interface. Supports LPRINT, LLIST and COPY. CMOS real time clock calendar with battery backup. 8 bit parallel I/O ports. CMOS A/D converter. Bus connector for RAM pack.

RS232/TTL Level Converter Plans

Cosmonics **Model:** CH 24 **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000
Construct an RS232/TTL level converter from inexpensive components. This converter, when used with the Cosmonics TTL Serial Input/Output Port Package, allows connecting a TS 1000 or ZX81 to most RS232C peripherals.

RX81 Robotics Interface

Zodex **Price:** \$75.00 **Platforms:** TS 1000, TS 2068
Input/output board with 8 latched outputs (capable of driving an LED, transistor switch or relay) and 8 inputs (switched or TTL level). Can be used alone or with the Computer Continuum buffered expansion

bus board for up to 32 simultaneous I/O lines.

The RX81 was used in Bruce Taylor's H.E.N.R.Y. robot, described in Robotics on a Budget and published in a book by TAB in 1985.

Budget Robotics purchased rights to the RX81 board from Zodex in late 1984.

Serial Input Port Plans

Cosmonics **Model:** CH 22 **Date:** 1982 **Price:** \$5.00 **Platforms:** TS 1000

Spectrum Hardware Adapter Interface

G. Russell Electronics **Date:** 1985 **Price:** \$35.00 **Platforms:** TS 2068
Lets you use Sinclair Spectrum micro drives/other Spectrum hardware on the TS 2068.

Spectrum Interface

John Mathewson **Model:** JWM-7 **Price:** \$39.95 **Platforms:** TS 2068
This device was designed specifically for connecting the DISCIPLE disk system to the TS 2068. It was a "twister" board that included 9 and 12 volt power supplies.

STD Bus Interface

AERCO **Model:** ZX-SB **Price:** \$79.00 **Platforms:** TS 1000
Converts the ZX bus to STD Bus. Allows for use of peripheral interface cards from numerous manufacturers. On-board memory expansion option. Memory-mapped ports.

Telephone Dialer

Compu-Pak **Date:** 1983 **Price:** \$49.95 **Platforms:** TS 1000
Expansion for the Compuboard system.

Timer/Counter/Music Board

Redditch Electronics **Date:** 1983 **Price:** \$50.00 **Platforms:** TS 1000
Three programmable counters. Controlled in BASIC. May be used as timer, counters, or frequency generators (including audio range).

TTL Serial Input/Output Port Package

Cosmonics **Date:** 1983 **Price:** \$26.00 **Platforms:** TS 1000
Software and plans for building input and output ports which fit inside a ZX81 or TS 1000. When used with an RS232/TTL level converter, can connect to most RS232C peripherals.

Universal I/O Port

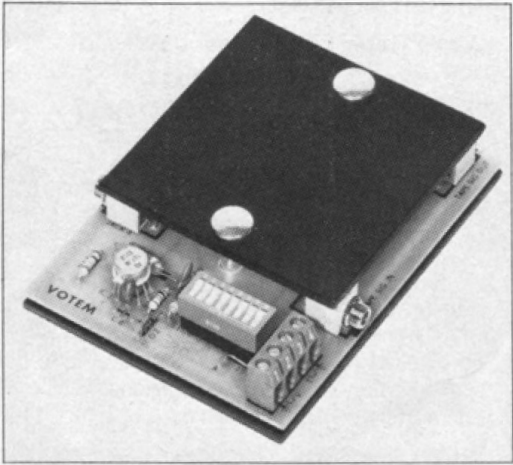
Thomas B. Woods **Date:** 1986 **Price:** \$69.95 **Platforms:** TS 1000, TS 2068
Control and sense external devices using any TS computer. 8 bits parallel input, 8 bits latched output plus 2 handshaking lines. Easy to set up or reconfigure many times. This board forms the foundation of a series of software applications that teach concepts of port programming.

VOTEM

Down East Computers **Date:** 1982 **Price:** \$59.95 **Platforms:** ZX80, ZX81, TS 1000, TS 2068
The VOTEM was a hardware/software package that could measure, display and record real world analog signals via the cassette input. Any physical phenomenon (pressure, light temperature, etc.) that could be represented by a DC voltage could be measured.

The name of the product came from the fact that it could measure VOLTage and TEMperature. The design incorporated a DIP switch to allow connection between terminals for voltage, external temperature probe, and an internal temperature sensor.

A built-in tape signal conditioner circuit allowed for loading tapes at lower volume,



resulting in less noise. It came with temperature probe and 35 page manual.

Ray Mills and Alger Salt developed the VOTEM in the early 1980s. It used the Analog Devices AD537 voltage-to-frequency converter to measure voltages presented to the input of the VOTEM. They sold a few hundred, including many outside the States.

One was sold to a college engineering group that used it in a project that went on one of the space shuttles. The VOTEM was used in an experiment to manufacture hollow spheres in zero gravity. The experiment failed but the VOTEM measured the temperature inside the space shuttle cargo bay.

Medi Products of Salt Lake City, a medical instrument company, designed a system around the Timex/Sinclair 1000, VOTEM and other hardware to "reclean and resterilize artificial kidneys."

Other applications included interfacing to laboratory instruments such as pH meters and spectrometers, weather monitors, etc.

Fred Nachbaur wrote a data acquisition tool called VDAQ1-HR ("VOTEM Data Acquisition - Hi Res"). His version allowed for multi-screen acquisition, variable scale and timebase. Could measure frequency without the VOTEM.

Hardware

Widget

CAI Instruments, Inc. **Price:** \$49.95
Platforms: ZX80

Interface board allows ZX80 to communicate through serial (RS232) port and parallel TTL input and output ports.

ZAD: Zebra Analog Digital Interface

Zebra Systems, Inc. **Model:** C403
Date: 1986 **Price:** \$39.95 **Platforms:** TS 1000, TS 1500, TS 2068

8-channel analog-to-digital interface for ZX81, TS 1000, TS 1500, TS 2068. Manual includes sample applications and I/O software. 8-bit resolution, 0-5 volt scale range.

ZX80/1 User Port

Technomatic **Price:** \$20.00 **Platforms:** ZX80, TS 1000

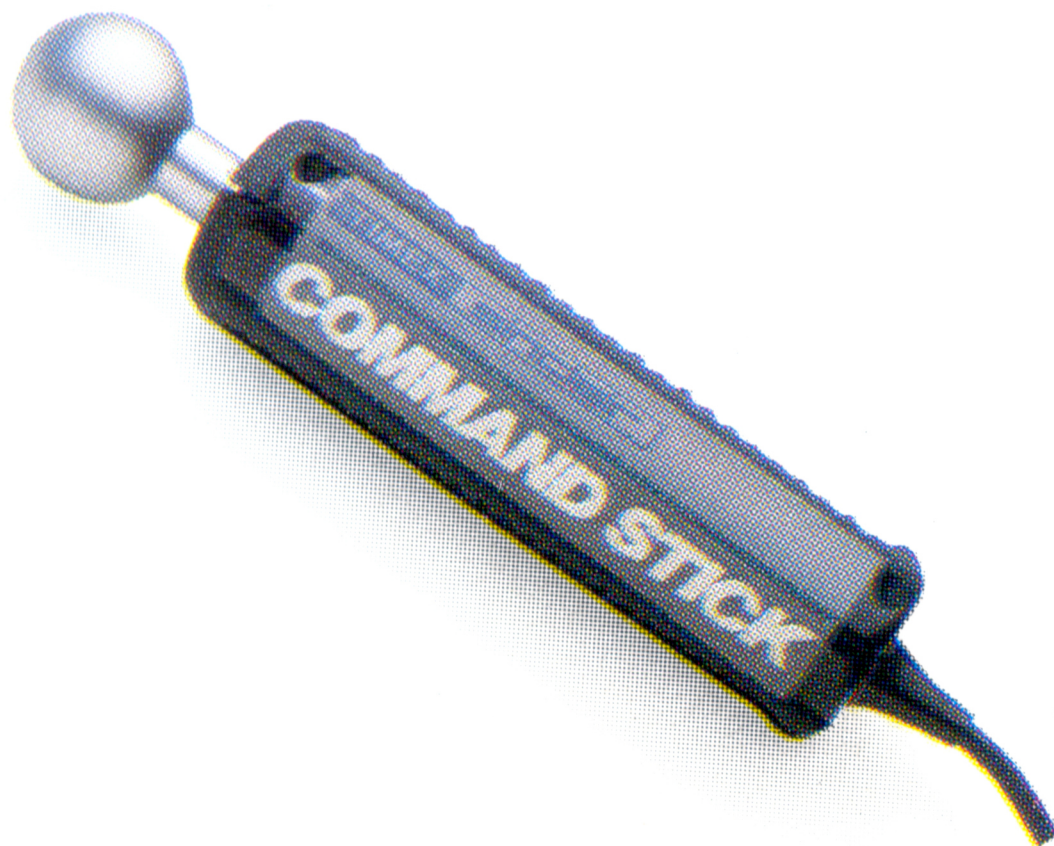
Small board allowing 8 independent input channels and 8 output channels, directly controlled from BASIC or machine code.

ZX81 Parallel Input/Output Board

Andrew Developments **Date:** 1982
Price: \$35.00 **Platforms:** TS 1000
16 user-programmable lines; fully TTL compatible.

ZXPANDER

User Friendly Research **Date:** 1983
Price: \$24.95 **Platforms:** TS 1000
Connect three expansion modules to the TS 1000. Flexible ribbon cable.



Joysticks

Video games were, for many (especially those under 18), the raison d'être for computers. Sure, they let their parents buy the computer for “educational” use but they put it to more prosaic use, replacing the aging Atari 2600.

The first Sinclair computers were not particularly well suited to be gaming computers. They lacked joystick ports, had low resolution graphics and, in the case of the ZX80, video display challenges that made gaming nearly impossible.

The Sinclair keyboard could (and was) used to control a player’s ship or character in games, with the obvious shortcomings. As a result, adding a joystick which emulated certain keystrokes, was a popular option.

Timex included two joystick ports on the TS 2068, on each end of the computer. Unfortunately, the Timex joystick ports were not compatible with the most popular ZX Spectrum standard, the Kempston joystick. A few solutions to that shortcoming were available for the dedicated Timex gamer.

2068 Spectrum Joystick Port

John Oliger Co. **Platforms:** TS 2068
Small joystick board that plugs into the 2068 expansion board to emulate the Kempston Joystick Interface. For use with a Spectrum emulator, ROM, or ROMswitch and Spectrum software. Interface differs from the real Kempston in that it is fully decoded. There are no hardware conflicts when using this device with other hardware add-ons and the 2068.

AGF Joystick Interface II

Integrated Data Systems **Date:** 1983
Price: \$36.00 **Platforms:** TS 1000
For one or two joysticks. Controls eight directions, including 45 degrees and fire.

Atari Compatible Joystick

Zebra Systems, Inc. **Model:** C121
Price: \$9.95 **Platforms:** TS 2068

Deluxe Joystick

Zebra Systems, Inc. **Model:** C147
Price: \$19.95 **Platforms:** TS 2068

Dual Joystick System

RKL Systems **Model:** RKL-J2 **Price:** \$89.95 **Platforms:** ZX80, TS 1000

Games Player Joystick

Interface

DK'tronics **Date:** 1985 **Price:** \$19.95
Platforms: TS 2068
Kempston compatible features "freeze" and slow motion control. Requires a twister board.

Gamesmate

G. Russell Electronics **Price:** \$19.95
Platforms: TS 2068
Spectrum (Kempston) compatible joystick interface. Plugs into cartridge port.

Joystick

Thurnall Electronics **Model:** TE20
Date: 1982 **Price:** \$25.50 **Platforms:** TS 1000
Required the Thurnall I/O board to interface to the computer.

Joystick

Microcomputers Plus, Inc. **Price:** \$14.95 **Platforms:** TS 1000

Joystick

Atto-Soft **Date:** 1982 **Price:** \$14.95
Platforms: TS 1000
Designed for use with Atto-Soft's ZX-Man but includes examples to write your own programs.

Joystick

E-Z Key **Platforms:** TS 1000
Requires no wiring and functions like arrow keys and zero on computer.

Joystick

Midwich Computer Co., Ltd **Date:** 1983
Price: \$19.95 **Platforms:** TS 1000
Atari-style joysticks and interface unit.

Joystick Adaptor

Zebra Systems, Inc. **Model:** C120
Date: 1983 **Price:** \$19.95 **Platforms:** TS 1000
Connect Atari compatible joystick to the ZX81/TS 1000. Plugs into back of computer; expansion connector for other peripherals. Instructions for patching popular games. Uses port 1Dh.

Joystick and Controller

Midwich Computer Co., Ltd **Date:** 1983
Price: \$14.95 **Platforms:** TS 1000
Analog joysticks plug into controller board which fits expansion slot of ZX81 or Spectrum.

Joystick Controller

Synchronize **Date:** 1982 **Price:** \$39.95
Platforms: TS 1000
Connects up to 4 Atari joysticks, full 8 direction movement.

Joystick for 8K ROM ZX80

Ron Howard **Date:** 1982 **Price:** \$6.00
Platforms: ZX80
Plans and parts to add a joystick to ZX80 with 8K ROM.

Joystick for ZX81

Chris Taraba **Date:** 1982 **Price:** \$39.00
Platforms: TS 1000

Connect Atari joystick to ZX81. Access through BASIC or machine code. Complete kit.

Joystick Instructions

Eric Beckett **Date:** 1983 **Price:** \$3.50
Platforms: TS 1000

Simple, illustrated instructions for connecting an Atari joystick.

Joystick Interface

Sinclair Place **Date:** 1983 **Price:** \$39.00 **Platforms:** TS 1000

Use two joysticks with ZX81 games. Includes instructions to program your own games and adapt existing games. Manufactured by Indescomp.

Joystick kit

Rayco **Date:** 1983 **Price:** \$30.00
Platforms: TS 1000

Instructions and kit for connecting Atari joysticks.

Joysticks

Mikro-Gen **Price:** \$18.95 **Platforms:** TS 1000

Analog joysticks for use with Mikro-Gen's A/D Converter Board.

Joysticks

R. M. Norris **Date:** 1983 **Price:** \$3.00
Platforms: TS 1000

Complete plans and a program for interfacing/testing Atari joysticks.

Single Joystick System

RKL Systems **Model:** RKL-J1 **Date:** 1982 **Price:** \$69.95 **Platforms:** ZX80, TS 1000

Souse

Zunk Custom Electronics **Platforms:** TS 2068

A mouse that acts like a joystick.

Spectrum Joystick Interface

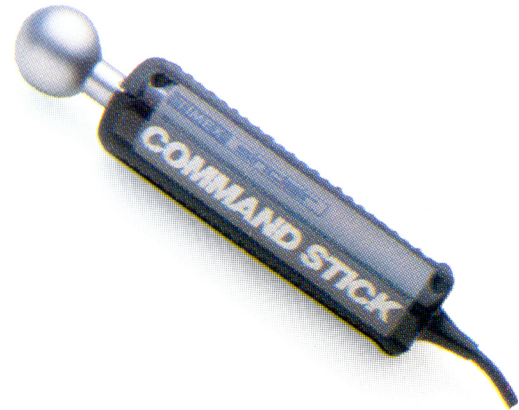
John Mathewson **Model:** JWM-6 **Price:** \$19.95 **Platforms:** TS 2068

Fully decoded interface for use with Spectrum programs requiring a Kempston joystick interface. Designed to work with 9-pin Atari type joysticks. Intended for use with TS 2068 operating in Spectrum mode using either a ROM switch or emulator.

TS 2090 Commandstick

Timex Computer Corporation **Model:** TS 2090 **Date:** 1984 **Platforms:** TS 2068

The TS 2090 Commandstick had its origins in the Fairchild Channel F Jet-Stick Controller. The Fairchild Channel F was a second-generation video game console with a unique, hand-held controller that



featured a triangular knob on top. Zircon bought the rights to the Channel F when Fairchild left the video game business and made minor changes to the joystick for a second generation Channel F.

Zircon also sold this model joystick as the Video Command in early 1982. They upgraded it later that year to the Zircon Z-Stick, a “new and improved” model that bore a striking resemblance to the Timex stick. Cosmetic modifications to the Z-Stick for Timex resulted in the 2090 Commandstick.

TS 1000 Trackball

Zebra Systems, Inc. **Model:** TBTMX01 **Date:** 1986 **Price:** \$39.95 **Platforms:** TS 1000, TS 2068

WICO trackball originally designed for use with the Apple II, which had analog joysticks. Came with WICO trackball and Apple interface card, Zebra-designed Apple-to-Timex bus interface and instructions for reading trackball X and Y values. Combination worked with TS 1000/1500 and TS 2068.

TS2068 Trackball

Zebra Systems, Inc. **Model:** TBTMX02 **Date:** 1986 **Price:** \$19.95 **Platforms:** TS 2068

WICO trackball controller, designed for the TI 99/4A. Modified by Zebra to be Atari-compatible.

Z-Stick

Zebra Systems, Inc. **Model:** C401 **Date:** 1986 **Price:** \$29.95 **Platforms:** TS 2068

Z-Stick is a joystick interface for use with Spectrum game software on the TS 2068. Z-Stick is Kempston-compatible. It also includes two jacks for sound and beep; a power LED, and a reset switch.

Z-Stick Plus

Zebra Systems, Inc. **Model:** C402 **Date:** 1986 **Price:** \$39.95 **Platforms:** TS 2068

Z-Stick plus Spectrum emulator ROM.

ZX Joystick

Micro Da et Fils **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000

Full details on adding a joystick including fire button.



Keyboards

The Sinclair membrane keyboard was widely acknowledge as its Achille’s heel and re- viled in the popular press. Solutions for correcting the shortcoming were numerous and im- mediate: the first information about attaching a “real” keyboard appeared in the second is- sue of Syntax ZX80.

As with other hardware solutions to Sinclair challenges, the variety and ingenuity of keyboard fixes was quite astounding.

One popular resolution involved overlays to the membrane keyboard. They didn’t solve the lack of haptic feedback but did address the “touch-typing” problem of finding the exact spot to press.

At the other end of the spectrum, Memotech (and others) offered full-size keyboards that plugged into the TS 1000 or provided an entirely new case and keyboard for the com- puter.



“Peel and Stick” Keys

E. H. Enterprises **Date:** 1983 **Price:** \$5.95 **Platforms:** TS 1000

Tiny rectangles of self-adhesive foam pads printed with a portion of the legends on the TS 1000 keyboard.

55-key Keyboard

Schultz Systems **Date:** 1981 **Price:** \$29.95 **Platforms:** ZX80

Plans and complete kit (keyboard, parts, etc) for add-on keyboard.

Automatic Repeat Function

Kabre Electronics **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000

Module with built-in self-test LED, automatic and continuous character input.

Big-Key Legends

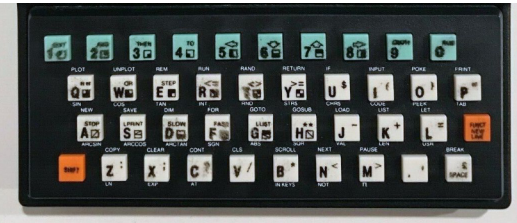
Daydesign **Date:** 1983 **Price:** \$7.00 **Platforms:** TS 1000

Dry transfer key cap graphics in red and black; identical to those on the Sinclair keyboard. For use on full size keyboards with standard 1/2" key caps.

Beeper System

Compusa Corporation **Model:** BLS-201 **Date:** 1983 **Price:** \$29.00 **Platforms:** TS 1000

Gives feedback for keyboard by causing each key press (except shift alone) to produce a distinctive beep. Inserts between the keyboard and computer.

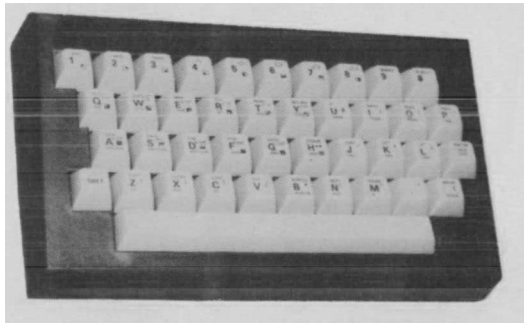


Buttonset

Filesixty **Date:** 1982 **Price:** \$19.50 **Platforms:** ZX81, TS 1000

Overlay with moving keys. Fits over existing keyboard and is held in place by adhesive strips. Keys press the membrane keyboard via specially marked dimples on the underside. Keys are color coded and all functions clearly printed.

The filesixty buttonset and Secondbase keyboard are the same mechanism. The filesixty has color keys with black printing. Its the ‘Enter’ key is labeled ‘New Line’ and the 0 is ‘Rub’. The same keys on the Secondbase are labeled ‘Enter’ and ‘Delete’, respectively, and all of its keys are black with white lettering.



Byte Back Keyboard

Byte-Back Co **Date:** 1983 **Price:** \$89.95 **Platforms:** TS 1000

Upgraded keyboard with full-size space bar and two shift keys.

CARDCO Numeric Keypad

Cottage Technology **Date:** 1984 **Price:** \$44.95 **Platforms:** TS 2068

Plugs into joystick port. Includes software that converts STICK values into numeric input. No modifications required; not for use with cartridges.

Hardware

Chirper

Audiograph Co. **Price:** \$9.95 **Platforms:** TS 1000

Improves speed and accuracy of keyboard data entry. The sound varies from a buzzy-chirp to a click and depends on what the computer is doing. Sound is produced when a program runs, so some sound effects can be created. Installs inside computer.

ClearTouch

ClearTouch **Date:** 1983 **Price:** \$8.50 **Platforms:** TS 1000

A thin transparent keyboard overlay that speeds input and improves accuracy. Lets you feel key positions, yet thin enough not to interfere with typing.

Compact Keyboard

Sinclair Place **Date:** 1983 **Price:** \$88.00 **Platforms:** TS 1000

Full function keyboard in metal case. Two space keys, full space bar and numeric pad. Single-stroke keys for DELETE, STOP, EDIT and FUNCTION. Shift keys are blue with blue legends for shifted operations. Function key is green; function operations in green. Delete, stop and edit are red. Numeric keys are blue. All other keys and legends are black.

Compact Keyboard

Haven Hardware **Price:** \$55.00 **Platforms:** ZX80, ZX81, TS 1000

Full sized, uncased. No soldering required. Repeat key included.

Complete Keyboard Plans

Spectra Computer Products **Date:** 1983 **Price:** \$7.00 **Platforms:** TS 1000

Documentation packet that covers decoding a standard ASCII keyboard, decoding shift keys, reset, and repeat keys, and keyboard beeper.

Contact Lens

Warren Imports Group **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

Overlay for ZX81/TS 1000 keyboard to help with finger positioning.

DIY Keyboard

Synchronize **Date:** 1982 **Price:** \$37.50 **Platforms:** TS 1000

Full-size, 62-key keyboard with instructions for converting to work with Sinclair computers. Keyboard manufactured by Texas Instruments.

dk Keyboard

DK’tronics **Date:** 1983 **Price:** \$89.95 **Platforms:** TS 1000

Cased keyboard with 52 keys, 12 of which are on the number pad. Case measures 15 x 9 x 2 1/2". Computer fits inside (removed from original case). Comes with motherboard to attach RAM and extend expansion bus to rear edge of case.

Double “H” Keyboard

Double H Electronics **Price:** \$46.00 **Platforms:** ZX80, TS 1000

Full-size, full-stroke, 53 key, fully assembled, gold contact keyboard for all Sinclair ZX80/ZX81, MicroAce, and TS 1000 computers. Full-length space bar and 2 oversized shift keys for easier typing. Includes plans and schematics for three special circuits you can build to utilize the 12 extra keys: electronic shift-lock, automatic repeat, automatic shift.

E-Z Key 40

E-Z Key **Platforms:** TS 1000

Replacement flat keyboard with embossing around each switch and three-color legends and graphics. Plug in replacement for original keyboard.

E-Z Key 44

E-Z Key **Date:** 1982 **Price:** \$70.00 **Platforms:** TS 1000

44 key tactile feel keyboard. Includes all graphics and legends. 4 additional keys for edit, delete, quote, function.



E-Z Key 60

E-Z Key **Date:** 1982 **Price:** \$84.95 **Platforms:** ZX80, TS 1000

Large 60 key tactile feel keyboard plugs into same connectors as the existing keyboard on your ZX81, TS 1000, TS 1500 or TS 2000. TS 1000 legends and graphics in three colors on the base-molded moving key with alphanumeric characters; 8 automatic shifted keys, 2 shift keys, numeric key pad, 5" space bar. 60 small calculator-style keys, silk-screened legends in 3 colors on the base, molded legends and graphics on key tops. Keys for EDIT, DELETE, single and double quotes, colon, semicolon, FUNCTION and STOP. Two shift keys, numeric keypad and optional mounting base. Overall keyboard dimensions 10" x 4".

EC-11 Custom Enclosure

E-Z Key **Model:** EC-11 **Date:** 1983 **Price:** \$25.00 **Platforms:** TS 1000

Hammond 11" sloped case customized for use with the E-Z Key 60 keyboard. 11" wide x 9" deep x 3" high.

EC-14 Custom Enclosure

E-Z Key **Model:** EC-14 **Date:** 1983 **Price:** \$30.00 **Platforms:** TS 1000

Hammond 14" sloped case customized for use with the E-Z Key 60 keyboard. 14" wide x 9" deep x 3" high.

FD 81 Keyboard

Fuller Micro Systems **Date:** 1982 **Price:** \$37.50 **Platforms:** TS 1000

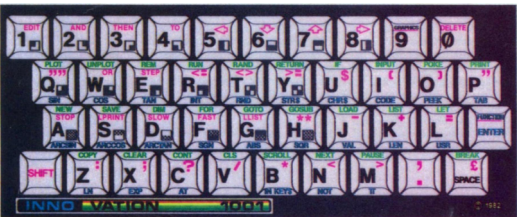
Kit.

FD System 42

Fuller Micro Systems **Date:** 1982 **Price:** \$79.95 **Platforms:** TS 1000

Hardware

Keyboard and case. Case measures 8" x 14" 2 1/2". Sinclair fits inside, connects without soldering. Extra shift and newline keys.



Innovation 1001

Innovation **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000

Tactile overlay, raised keys, labeled in four colors. Overlays existing keyboard.

Jigsaw Executive Keyboard

Data-assette **Date:** 1982 **Price:** \$89.95 **Platforms:** TS 1000

Fully cased with 44 full stroke keys. Special features include a beep for every key, a repeat key, and a full space bar. An additional shift key and an “ON-OFF” beep and CPU switch.

KAYDE Keyboard

Kayde Electronic Systems Ltd. **Date:** 1982 **Price:** \$75.90 **Platforms:** TS 1000

Fully cased fully sized keyboard for the TS 1000 or ZX81. 40 full stroke keys with all legends printed in 2 colors. Simple soldering of ribbon cable is all that is needed for installation. Repeat key.

KD-81 Keyboard

Suntronics **Model:** KD-81 **Date:** 1983 **Price:** \$69.95 **Platforms:** ZX81, TS 1000

Full size keyboard conversion. 41 keys with full-size space bar. Allows touch typing. Same key layouts as Sinclair. Two color key tops. Keyboard case holds both keyboard and computer. Commands and graphics spelled out on key tops. Rear cutout allows any RAM to be plugged in.

Hardware

Keyboard

Redditch Electronics **Price:** \$45.00
Platforms: ZX80, TS 1000

Full-size 40 key keyboard. Symbols marked in two colors.

Keyboard

Synchronize **Price:** \$5.00 **Platforms:** TS 1000

Instructions on how to add a full-size keyboard to a ZX80 or 81. Includes instructions to use extra keys for shift lock, automatic shift, automatic repeat and reset.

Keyboard

Software House, The **Date:** 1983
Price: \$45.00 **Platforms:** TS 1000

Complete plans.

Keyboard

Zebra Systems, Inc. **Model:** C141
Date: 1983 **Price:** \$89.95 **Platforms:** TS 1000

Same key mechanism as used by IBM, Texas Instruments, Hewlett Packard, and others. Full travel, gold inlaid contacts. 40 keys plus space bar. Custom molded enclosure. Sharp TS 1000 legends in two colors are easy to read and will never wear off. Connector for numeric keypad.

Strikingly similar to the Byte Back Keyboard.

Keyboard

Toptronics Company **Date:** 1984 **Price:** \$54.81 **Platforms:** TS 1000

Keyboard Audio Tone

TV Service of Cambridge Ltd **Price:** \$18.00 **Platforms:** TS 1000

Keyboard beeper

Burnett Electronics **Date:** 1981 **Price:** \$12.00 **Platforms:** ZX80

Low power CMOS circuit. Beeps when key is pressed.

Keyboard beeper

Marex Electronics **Price:** \$10.00 **Platforms:** TS 1000

Keyboard Beeper

Zebra Systems, Inc. **Model:** C133
Date: 1983 **Price:** \$19.95 **Platforms:** TS 1000

Plugs into expansion port; beeps when a character is accepted by the computer's keyboard input routine. Expansion connector allows other devices to be connected. Beep can be triggered from BASIC.

Keyboard Beeper

Fulcrum Products **Price:** \$19.00 **Platforms:** TS 1000

Provides missing feedback. Beep in SLOW and FAST modes. Fits inside case under keyboard or PCB; suits most full size keyboards.

Keyboard Beeper

Kempston Micro Electronics **Date:** 1982 **Price:** \$12.00 **Platforms:** TS 1000

Keyboard Conversion Kit

Jameco **Model:** JE682 **Date:** 1983
Price: \$99.95 **Platforms:** TS 1000

Kit allows the use of either the full-size keyboard or the Sinclair/Timex keyboard. Full-size industrial grade keyboard with 62 keys, 2 p.c. boards, 18" ribbon cable, DIP socket and 4 rubber feet. The keyboard conversion kit can be mounted in DTE-AK enclosure. A label representing the ZX81/1000 keyboard layout is placed on the enclosure.

Keyboard conversion plans

W S M Entertainment **Date:** 1982
Price: \$4.00 **Platforms:** TS 1000

Plans to convert a full-size keyboard with shift-lock key. Includes parts list, source of materials, directions and working drawings for a wood case to hold keyboard and computer.

Keyboard Conversion Plans

JST Enterprises **Date:** 1984 **Price:** \$3.75 **Platforms:** TS 1000

Construction/conversion plans with simple joystick interface.

Keyboard Enclosure

Full Spectrum, The **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000

Keyboard Interfaces KBD-1 and KBD-2

E-Z Key **Price:** \$39.95 **Platforms:** TS 1000, TS 2068

Keyboard interface; plugs into the edge connector so that you do not have to open your computer to plug a keyboard in. KBD-1 for TS 1000; KBD-2 for TS 2068.

Keyboard Kit

Haven Hardware **Price:** \$27.00 **Platforms:** ZX80

Full size keyboard with repeat key and single key rubout.

Keyboard Kit

Research Application Products **Date:** 1982 **Price:** \$80.00 **Platforms:** TS 1000

73 full size keys with 46 automatically shifted functions, editing/game key row and special graphics section. Double-sided PC board, 3 color silkscreened key legends, parts and instructions.

Keyboard Mask

Jameco **Model:** JE681 **Date:** 1983
Price: \$9.95 **Platforms:** TS 1000

Adhesive overlay for the TS 1000 keyboard. Raised outline around each key aids in positioning. Key labeling is all white with a thick white border around each key.

Keyboard Overlay

Frog Software **Date:** 1983 **Price:** \$4.95 **Platforms:** ZX80, TS 1000

Vinyl overlay similar to Kopak design but thinner.

Keyboard Sounder

D. Bruce Electronics **Price:** \$15.00 **Platforms:** ZX80, ZX81

Emits a short beep for keypresses. Models for ZX80 and ZX81.

Hardware

Keyboard System

John Mathewson **Model:** JWM-1 **Price:** \$69.95 **Platforms:** TS 2068

47 key keyboard with interconnecting cable, interface card, wooden cabinet and keycap legends. Plugs into cartridge port of 2068. Includes single key entry for EDIT, DELETE, CAPS and cursor keys.

Keyboard Tactile Feedback Overlay

Powell Hargrave **Price:** \$3.95 **Platforms:** ZX80, TS 1000

Clear vinyl keyboard overlay with holes for each key.

Keyboard with complete parts and plans

L.J.H. Enterprises **Date:** 3/1/1981
Price: \$65.00 **Platforms:** ZX80

Keypad

Double H Electronics **Price:** \$8.00 **Platforms:** ZX80, MicroAce, ZX81, TS 1000

Two different keypads available, matching double H keyboard. Both are assembled but unwired, so you can use them either for numerical keypads or as extra keys.



KLIK Keyboard

Kempston Micro Electronics **Model:** KB01 **Date:** 1982 **Price:** \$79.95 **Platforms:** TS 1000

Keyboard attaches directly to the TS 1000 or ZX81, replacing the existing membrane. Positive response from the keys. All legends marked in 2 colors.

Hardware

Also sold by E. Arthur Brown as the MK II Keyboard.

KLIK-2
Data-assette **Date:** 1982 **Price:** \$15.00 **Platforms:** TS 1000

Automatic repeat for the KLIK keyboard.

KOPAK Keyboard
KOPAK Creations, Inc. **Date:** 1983 **Price:** \$99.95 **Platforms:** TS 1000
Full-size space bar, additional ENTER and extra shift keys. Optional numeric keypad and aluminum case.

KP-1 Keyboard Plans
Quest Research Associates **Date:** 1983 **Price:** \$7.50 **Platforms:** TS 1000
Step-by-step plans for converting to a full-size keyboard.



Kradle
K-2 Electronics **Date:** 1983 **Price:** \$195.00 **Platforms:** TS 1000
The Kradle was a keyboard and enclosure upgrade for the ZX-81 and TS 1000. It had 50 calculator-style keys (including a full-size space bar and two shift keys), 64K of RAM and circuitry to improve tape load/save.

The Kradle allowed users to copy the ROM to RAM and then turn the ROM off.

Unlike some other keyboard upgrades, the ZX-81/TS 1000 fit inside the Kradle, in its case, and connected to the expansion card via bus extension that provided the expansion on the back of the unit. The Kradle's keyboard connected through the ex-

pansion card instead of the keyboard connectors on the computer.

Nine extra keys provided automatic shifted versions of Function, Graphic, Edit, Delete, List and the cursor arrows.

It accepted Atari 2600 style joysticks and mapped them to the graphic and arrow keys.

Two add-ons offered RS-232 and parallel input/output expansion.

There appear to be two variants of the Kradle, one with a solid KRADLE, the other with an outline KRADLE name.



Memotech Keyboard
Memotech **Date:** 1983 **Price:** \$99.95 **Platforms:** TS 1000

High quality standard typewriter keyboard with TS 1000 legends. The keyboard is cable connected to a buffered interface which is housed in a standard Memopak case and plugs directly into the back of the TS 1000 or other Memopaks.

The blue version was available first.

Hardware

standard Sinclair legends on removable key tops, a full-size space bar and seven extra keys, plus edge card connector for adding extra memory. Likely the Dean Electronics keyboard, imported from England.

Professional Keyboard Plans
Smuk Enterprises **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

Repeat Key Module
Sinclair Place **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000

Repeating Key Module
Haven Hardware **Price:** \$10.00 **Platforms:** ZX80, TS 1000

Secondbase keyboard
Secondbase **Date:** 1984 **Price:** \$15.00 **Platforms:** TS 1000

The filesixty buttonset and Secondbase keyboard are the same mechanism. The filesixty has color keys with black printing. Its the 'Enter' key is labeled 'New Line' and the 0 is 'Rub'. The same keys on the Secondbase are labeled 'Enter' and 'Delete', respectively, and all of its keys are black with white lettering.

Shift Lock Module
Kaltek Calculator Technology **Model:** SL-6 **Price:** \$17.46 **Platforms:** TS 1000

Enables one-finger keying via touch switch to suit user, on/off keyboard. Holds SHIFT active about one second, freeing one hand. Speeds keying; helps handicapped. Module, capacitor and LED fit inside all cases.

Shifter board
Jim Houston Enterprises **Platforms:** TS 1000
Allows you to use the extra keys on a large keyboard.



MKIV Keyboard
E. Arthur Brown Company **Date:** 1983 **Price:** \$89.95 **Platforms:** TS 1000

Plans for keyboard conversion with reverse video
L.J.H. Enterprises **Date:** 3/1/1981 **Price:** \$10.00 **Platforms:** ZX80

Plans to build full size keyboard
T. W. Vessels **Date:** 1983 **Price:** \$2.00 **Platforms:** TS 1000

Professional Keyboard
Full Spectrum, The **Date:** 1983 **Price:** \$69.96 **Platforms:** TS 1000

Professional Keyboard
Sinclair Place **Date:** 1983 **Price:** \$89.00 **Platforms:** TS 1000
52 keys, outlets for MIC, EAR, TV, etc. Manufactured by Indescomp.

Professional Keyboard
Gladstone Electronics **Price:** \$85.00 **Platforms:** TS 1000
Full-size keyboard plugs into the ZX81/TS 1000 circuit board. Comes with



Hardware

Sounder

KML Incorporated **Date:** 1982 **Price:** \$12.00 **Platforms:** TS 1000
Beeps when key is pressed. Fits inside the computer.



A new keyboard enhancement for the Timex/Sinclair TS-1000, produced by Hard/Software Design

System Logic KBD-1 Keyboard

Synergistic Design **Date:** 1982 **Price:** \$89.95 **Platforms:** TS 1000
Incorporates a 58 key keyboard, 14 additional keys and a full space bar. All symbols are enlarged by 25%. Aluminum and steel construction.

The Synergistic Design keyboard shown in their early advertisements was not the product delivered.

System Logic KBD-2 Keyboard

Synergistic Design **Date:** 1983 **Price:** \$69.96 **Platforms:** TS 1000
The System Logic KBD-2 incorporates a 58 key keyboard; 15 additional keys and a full space bar. All symbols are enlarged by 25% and reproduced onto a white field. Aluminum and steel construction reduces RFI (radio frequency interference). Keyboard features single-stroke/single-entry electronic shift/shift lock and auto repeat. ENABLE prevents unwanted key entries. Connects without soldering.

Touch-A-Matic

KOPAK Creations, Inc. **Date:** 1982 **Price:** \$9.95 **Platforms:** ZX80, MicroAce, TS 1000

Vinyl overlay for Sinclair keyboard with punched holes to aid in data entry.

Typex/81 Keyboard Overlay

Ganhart/EARTHings **Date:** 1983 **Price:** \$5.95 **Platforms:** ZX80, TS 1000
Allows “touch typing” and improved game playing. Made of clear, self-adhesive vinyl with key-shaped rectangular holes for easy finger positioning and tactile feedback.

Walnut case for keyboard

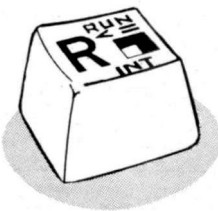
W S M Entertainment **Date:** 1982 **Price:** \$35.00 **Platforms:** TS 1000
Wired keyboard, complete with plans
L.J.H. Enterprises **Date:** 3/1/1981 **Price:** \$85.00 **Platforms:** ZX80

ZX/TS Touch Tab Overlay

L-P Overlays **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Self-adhesive overlay for positive key entry.

ZX81 Key-Top Symbols in 3 Colors

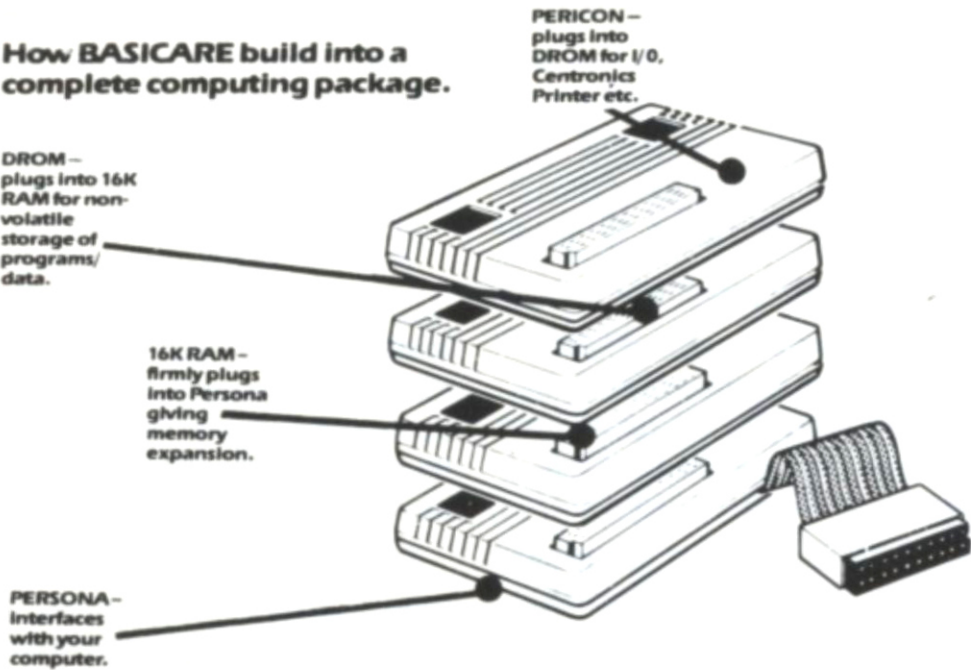
MULE Electronics **Date:** 1983 **Price:** \$9.95 **Platforms:** ZX81, TS 1000
Vinyl stickers for standard keycaps, printed in three colors (red, blue and black).



ZX81 Keyboard

RAMEX International **Price:** \$59.95 **Platforms:** TS 1000
Full size 43 key keyboard with single key selection of Function, Shift Lock and Graphic modes. 2 LED mode indicators. Simple plug-in installation. Fully enclosed. Made by Maplin Electronics.

Hardware



Miscellaneous Hardware

The breadth and depth of hardware accessories may be best represented by this section.

Users and enthusiasts pushed their Sinclair and Timex computers to do a very wide variety of tasks, including:

- programming EPROMs that they then used to extend their systems
- adding light pens to draw images with the computer
- interfacing to and programming the Atari 2600
- adapting the computer to be used in a car and more.

Some of these tools and expansions are obvious and sensible and others just make you scratch your head.

2068 EPROM Programmer

John Oliger Co. **Date:** 1984 **Platforms:** TS 2068

Board adds the ability to program 2764 and 27128 EPROMs to your 2068 system. Board comes with documentation on assembly, use, theory of operation, tips and details on replacing the Home ROM of the 2068 with a 27128 EPROM. Programmer requires the Vpp Power Supply or a 4-22VDC regulated adjustable power supply with voltmeter.

2068 User Cartridge Board

John Oliger Co. **Date:** 1985 **Platforms:** TS 2068

Plugs into the cartridge port of the TS 2068 computer. Can hold two 2764 or two 27128 EPROMs in any combination. It allows TS 2068 owners, when used with the TS 2068 or TS 1000 programmers, to store BASIC programs in cartridge form. Includes assembly instructions, schematic and instructions for its use with BASIC programs.

The 74LS138 chip allow you to select where to map the content of the EPROMs. The starting positions are: 0, 8192, 16384, 24576, 32768, 40870, 49152, 57354.

The cartridge shown fitted with EPROMs is configured to put the first 27C64 EPROM at memory location 32768 and the second 27C64 EPROM at 40870.

BASICare Modular Expansion System

BASICare Microsystems, Inc. **Date:** 1983 **Price:** \$59.00 **Platforms:** TS 1000

This modular system was designed to expand a ZX81, TS 1000 or TS 1500 computer into machine capable of handling advanced applications.

The cornerstone is the PERSONA, a module that is the interface between the computer and the other modules. With the PERSONA and other modules, the TS 1000 could be expanded to one megabyte

of memory, add sound, use an 80-column printer and add user-definable characters.

Memory Map

The BASICare system arranges memory in 64K pages. The Minimap module redefines the basic 64K of address space into vertical pages, each of which contains 64K of RAM. Within the 64K are four 16K blocks, arranged in vertical pages. Each page then has another 40K of address space for other BASICare modules.

FILE A is the normal location for BASIC programs. The display file is mapped to FILE B; it can be used for BASIC if no display is used.

TOOL is for machine language routines or data. The Toolkit module is designed to reside in this space. It accepts up to four 2K EPROMs, for a total of 8K. Regular RAM memory can occupy the TOOL region, giving volatile, but accessible RAM memory much like a standard 64K RAM. RAM 08, which accepts up to four 2K RAM chips, can be used in the TOOL segment. The TOOL segment can contain character set definitions created with USERFONT.

DATA is extra space for data and can be used for very long BASIC programs. File A can spill over into the 8K of DATA, giving a total of 24K of available memory to File A.

PATH is for future applications. SLOT is used in connection with the peripheral (Pericon) modules.

Modules

- **DROM**
DROM stands for Development Read Only Memory. This module can have up to 8K of RAM, via plug-on 2K RAM chips.
- **LINK a**
A module in the BASICare Modular Expansion System.
- **Minimap**
Memory mapping device to expand address space from 64K bytes to 1 megabyte. Organized into vertical 64K

- pages. Up to 16 pages can be supported.
- **PERICONa**
General purpose, user-programmable 24 lines of input/output. Up to 4 PERICONa can be used together.
 - **PERICONb**
24 lines of heavy duty output to access and control the outside world. Lines are capable of operating relays or driving long signal lines.
 - **PERICONc**
Centronics printer interface. A module in the BASICare Modular Expansion System.
 - **Persona**
The PERSONA is the base module of the BASICare Modular Expansion System, interfacing to other modules.
 - **RAM 08**
Low cost memory expandable from 2K to 8K. Located in an address space not used by BASIC.
 - **RAM 16**
16K memory module. On-board address decoding permits simultaneous use of many RAM 16 modules in conjunction with Minimap.
 - **RAM 64**
Arranged in 4 blocks of 16K; all can be used under MINIMAP control. On board address decoding allows simultaneous use of many modules with MINIMAP.
 - **SONUS**
Three-voice, AY-3-8910 sound-chip based module with stereo option. A module in the BASICare Modular Expansion System.
 - **Toolkit**
Uses up to four 2K EPROMs. Address space after on-board ROM. Allows calling TOOLKIT-held routines with USR function.
 - **Userfont**
User defined characters for use with DROM or RAM 08. Define a set of 128 characters. Characters can be stored in EPROM by using TOOLKIT.

Planned Expansion

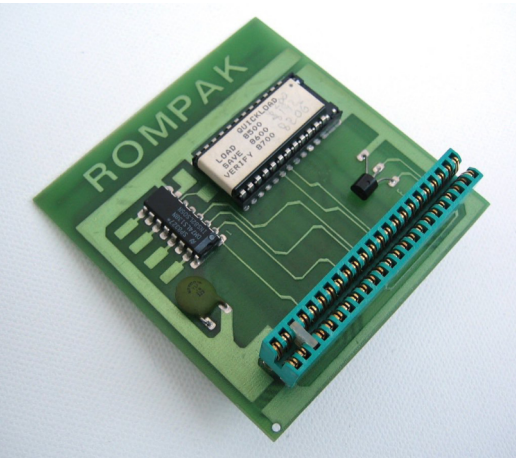
Future modules included high-resolution color graphics, a 16-bit microprocessor, high speed tape controller, serial module, memory expansion to 4 megabytes and a floppy disk interface.

Gladstone planned to introduce a PER-SONA module for the TS 2068, probably based on the PERSONA module for the Spectrum.

Biofeedback System

Ron LeMon **Model:** BIO-F-2K **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 1000

Conduct experiments safely at home. Complete instructions, plans and ideas for use. 2K.



ROMPAK with Quickload ROM.

Blank ROM Cartridge

ROMPAK **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Cartridge for ROMPAK ROMs.

Brainwave Control

Rosetronix **Date:** 1982 **Price:** \$500.00 **Platforms:** TS 1000

Brain waves control computer to give 256 commands. Can control a programmed English vocabulary with print to screen, printer, or voice synthesizer and can control an external robotic device. Or use galvanic skin response unit to output percentage of stress with English sentences. Can be used

as talking lie detector. Based on the book “Human Brain Waves to Electronic Speech.”

Bus Extender

Hale Software/EMSoft **Date:** 1990 **Price:** \$13.95 **Platforms:** ZX80, ZX81, TS 1000, TS 2068
ZX81/TS 1000 bus extender.

Car Comp

L & G Enterprises **Price:** \$59.95 **Platforms:** TS 1000
Accessory for the Timex/Sinclair that turns it into a traveling companion. The Car Comp is a rigid platform to which the computer and cassette recorder are attached. It can be used anywhere with AC power or a 12-volt cigarette lighter outlet.

Cartridge Adaptor

John Mathewson **Model:** JWM-3 **Platforms:** TS 2068
Allows you to plug cartridge peripherals into the rear expansion bus of the TS 2068 computer. Unit includes a through connector to allow connection of other peripherals.

Cartridge Board

Gesso Products **Date:** 1985 **Price:** \$9.95 **Platforms:** TS 2068
Printed circuit board that holds a ROM, RAM or EPROM chip. Use of the cartridge board is documented in the Dock It manual.

Comp-Cooler

G. Russell Electronics **Date:** 1984 **Price:** \$7.95 **Platforms:** TS 1000
Power supply-computer interface. Solves most overheating problems.

Cook TransCoder I

Cook Laboratories, Inc. **Date:** 1982 **Price:** \$490.00 **Platforms:** TS 1000
Hardware and software package to allow for programming TS 1000 software on a TRS-80 Model I or III. Circuit board connects TRS-80 to TS 1000. Develop on TRS-80, transfer to TS 1000 for testing.

Digitizing Tablet

Memotech **Platforms:** TS 1000
Vaporware announced in the Sync v3 n1 advertisement.

Dock It

Gesso Products **Date:** 1985 **Price:** \$17.95 **Platforms:** TS 2068
Software and hardware for programming EPROMs suitable for making dock cartridges.

Easy Z Mount

Sensible Technical Solutions **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Piggy back as many as 3 modules with no further loose mounting problems. Also allows for quick mounting or removal.

EPROM Burner

Integrated Data Systems **Date:** 1985 **Price:** \$32.00 **Platforms:** TS 2068

EPROM Copier P-2

Wisconsinc Electronics **Date:** 1983 **Price:** \$35.00 **Platforms:** TS 1000
Programs 2716 EPROMs with data provided by a 2816A EEPROM or another 2716 EPROM. Ideal for low-cost permanent storage of data or programs.

EPROM Programmer

Wisconsinc Electronics **Date:** 1982 **Price:** \$79.00 **Platforms:** TS 1000
Interfaces via three parallel I/O ports on the I/O Unit. Programs 2716 EPROMs.

EPROM Programmer

Compu-Pak **Date:** 1983 **Price:** \$99.95 **Platforms:** TS 1000
Expansion for the Compuboard system.

EPROM Programmer

Orme Electronics **Date:** 1983 **Price:** \$45.00 **Platforms:** TS 1000
Programs EPROMs directly in the 8192-10239 region of the TS 1000 memory map. The bytes to be stored being POKEd directly at the required address. Full software and instructions supplied.

Hardware

EPROM Reader/Programmer

Beacon Electronics **Date:** 1983 **Price:** \$49.95 **Platforms:** TS 1000

Store BASIC and machine code programs in 8-16K memory block.

EPROM Store Demonstrator

Timex Computer Corporation **Date:** 1982 **Platforms:** TS 1000

EPROM demonstrators intended for use in stores as selling tools. EPROM contains demonstration program, starts on power up. Graphic and interactive examples.

Extender Card EPROM reader/programmer

Z-Tron International **Date:** 1983 **Price:** \$79.95 **Platforms:** TS 1000

Program 2716 and 2732 EPROMs. 16K.

FD System Motherboard

Fuller Micro Systems **Date:** 1982 **Price:** \$29.95 **Platforms:** TS 1000

Allows expansion and I/O within Fuller keyboard case.

Flexible ribbon connector

Kayde Electronic Systems Ltd. **Date:** 1982 **Price:** \$25.90 **Platforms:** TS 1000

Extends ZX bus to prevents RAM pack wobble.

Flexible ribbon connector

Intercomputer, Inc. **Model:** PL7016B **Price:** \$24.95 **Platforms:** TS 1000

A flexible ribbon for connecting any RAM or expansion device. Prevents the usual system crashes caused by RAM pack movement.

Gaamworks

Brainchild Computer Works, Inc. **Date:** 1983 **Platforms:** TS 1000

Game module with cartridge interface, sound and Atari-compatible joystick ports. Cartridges would support up to 8K ROM via 2716, 2732 or 2764 EPROMs.

Black anodized aluminum case, 6 1/2" long x 1" deep. Joystick ports are two 8-bit parallel ports. Built-in speaker.

No evidence it was ever produced. All ads claimed it was soon to be released.

Game Changer Interface

Huron Valley Research, Inc. **Date:** 1984 **Price:** \$139.95 **Platforms:** TS 1000

Cross-connects the Atari 2600 VCS and TS 1000, allowing either to take control of whole blocks of shared memory. The shared memory includes the ROM inside the Atari game cartridge and shadow copies of that ROM in the TS 1000 RAM. Using this system, you can download ROM games to your ZX/TS, disassemble the 6502 machine code, edit the game (or create a new one), and upload back to the 2600 to play the game.

The system consists of two double-sided plated-through PC boards. The mother board plugs into the back of the ZX/TS and connects via ribbon cable to the Atari VCS adapter board, which plugs into the VCS cartridge slot. A cartridge can plug onto the back of the adapter board.

The mother board contains 4 HM6116 (2K static) RAMs and remaps internal RAM above their own 8K, for a total of 10K RAM in an unexpanded TS 1000. The 4K above RAMTOP contains the actual VCS ROM image. This image moves to a 0 REM statement for manipulation by the ZX/TS machine. Game execution can be accomplished by transferring the game code to the bottom of RAM and controlling the ZX/TS bus.

Menu driven software, supplied on cassette, includes two programs in BASIC and machine code which download the cartridges (one for 2K and 4K games, one for 8K games), and a 6502 assembler and disassembler.

With an extra RAM chip on the interface, it works with the AERCO disk drive.

Documentation consists of 7 photocopied typewritten pages, including an installation sketch and a hand-drawn schematic, important memory map locations, and operating instructions.

Graphic Tablet for TS2068

Zebra Systems, Inc. **Model:** C252 **Date:** 1985 **Price:** \$89.95 **Platforms:** TS 2068

KoalaPad, Zebra Graphics Interface, ZebraPainter software and manual.

Graphics interface has two 6-pin DIN connectors for the graphics tablet or analog joysticks. Expansion connector for additional peripherals.

Julian Clock Kit

Kaltek Calculator Technology **Platforms:** TS 1000

Keyed and Labeled ZX Connector

Zebra Systems, Inc. **Model:** C110 **Date:** 1983 **Price:** \$5.96 **Platforms:** TS 1000

Female solder-tail connector with key to match the TS 1000/ZX81. Custom label identifies each pin number and corresponding signal name.

Light Pen

Zebra Systems, Inc. **Model:** C109 **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000, TS 2068

Light pen, manual, computer interface module, demonstration programs on cassette.

Light Pen

DK'tronics **Date:** 1983 **Price:** \$39.95 **Platforms:** TS 2000, TS 2068

Plot, draw, erase, modify, save. Produce high resolution illustrations with 16 pre-defined instructions. Requires twister board.

Hardware

Light Pen

Zodex **Model:** LP81 **Date:** 1982 **Price:** \$69.96 **Platforms:** TS 1000

Plug-on module with three modes: DRAW, ERASE, and CLEAR. Allows entering complex graphics by just touching the screen. Upper 90% of screen is free for graphics; lower portion divided into three zones for changing modes. Images stored in strings, can be saved to cassette.

LINK a

BASICare Microsystems, Inc. **Date:** 1983 **Price:** \$64.95 **Platforms:** TS 1000

A module in the BASICare Modular Expansion System.

M1 * Adaptor

Silicon Mountain Computers **Date:** 1988 **Price:** \$15.00 **Platforms:** TS 1000

Small board to make RAM above 32K available for machine language. ULA plugs into this board, which corrects the M1 NOT memory addressing problem.

Memory Access Monitor

John Oliger Co. **Price:** \$9.95 **Platforms:** TS 1000, TS 2068

Eight LEDs indicate which bank of memory the Z80 is accessing. Uses only one IC. Can be useful in debugging hardware projects and machine code programs that cause the computer to crash by indicating where the CPU is after the crash. Supplied as bare PC board and schematic.

Morse Code kit

Metro Technology **Price:** \$22.00 **Platforms:** TS 1000

Two-board PCB set and software for transmitting and receiving Morse code. Split-screen display separates receive/transmit functions. Cliff Nunnery, NU4V, is the software author.

Hardware

Motion Platform for ZX81 and TS 1000

Bingel Robotics **Date:** 1983 **Price:** \$299.00 **Platforms:** TS 1000

Program you computer to make the platform move in any direction. Battery powered.

On-Off Toggle Switch for Audiograph Chirper

Audiograph Co. **Platforms:** TS 1000
Silences the Audiograph chirper.

Persona

BASICare Microsystems, Inc. **Model:** B20 **Date:** 1983 **Price:** \$59.95 **Platforms:** TS 1000

The PERSONA is the base module of the BASICare Modular Expansion System, interfacing to other modules. It buffers all the signals from the expansion port via a ribbon cable. It connects to other modules via a 64-way Organic Bus, configured to fit into the ZX81/TS 1000 memory map.

Gladstone Electronics planned to introduce a PERSONA module for the TS 2068.



Plus + Pac modular expansion unit.

Plus + Pac

Plus + Pac Systems International **Date:** 1983 **Price:** \$99.00 **Platforms:** TS 1000

Modular expansion unit. Base unit (enclosure and expansion interface) was \$49. Expansion modules included 64K RAM, color graphics (248x192 pixels), voice module, modem, Centronics and RS232 modules. Each expansion module was \$99.

Port-A-Sinc

Anderson Engineering **Date:** 1982 **Price:** \$140.00 **Platforms:** TS 1000

Attache case with integrated battery back-up power supply.

PrestoDigitizer

Innovision **Platforms:** ZX80

Digitizing tablet originally designed for the ZX80. User would have been able to write on the table and have the output appear as characters or draw on the tablet and output as graphics on the screen. The tablet was eventually available for Atari computers.

RAM Pack Anti-Wobble

Stephen Adams **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000

Metal clamp that eliminates RAM pack wobble. It includes the capacity for printer and other equipment.

Real Time Clock

Zunk Custom Electronics **Date:** 1988 **Price:** \$15.00 **Platforms:** TS 2068

Clock with three year calendar, battery backup to retain time and date. Board plugs into the cartridge port. Comes with BASIC and relocatable machine code software. Time and/or date can be displayed anywhere on the upper or lower screen, selectable attributes.

Real Time Clock

Byte-Back Co **Date:** 1986 **Price:** \$79.95 **Platforms:** TS 1000, TS 2068

Clock module with battery back up. Logic signal output with LED status indicator can be used to control external devices

based on time independent of the computer. DIP switches allow mapping of the module to the 8-10, 10-12, 12-14 or 14-16K areas of memory.

Realtime Clock

User Friendly Research **Date:** 1983 **Price:** \$39.95 **Platforms:** TS 1000

Bare board or fully-assembled realtime clock module.

Reset Button

Fulcrum Products **Date:** 1983 **Price:** \$2.00 **Platforms:** TS 1000

Reset Control

Dynamic Designs **Date:** 1983 **Price:** \$4.50 **Platforms:** TS 1000

Add system reset capability to permit quick recovery from crashes without powering down peripheral equipment. Control attaches to computer with two wires.

Reset switch

Indiana Software Group Inc. **Date:** 1983 **Price:** \$5.95 **Platforms:** TS 1000
Kit with parts.

RF shield for ZX80 or Microace

Outbound Engineering **Date:** 1981 **Price:** \$5.00 **Platforms:** ZX80, MicroAce

Kit to reduce TV interference.

Ribbon cable connector

Computer Continuum **Date:** 1983 **Price:** \$7.00 **Platforms:** TS 1000

Extends ZX bus to prevent RAM pack wobble.

RMP 2000

Bingel Robotics **Date:** 1983 **Price:** \$388.00 **Platforms:** TS 1000

Robot motion platform controlled by ZX80, ZX81 or TS 1000. Dedicated micro-computer controls the two drive motor positions.

Hardware

SCLD Chip

John McMichael **Date:** 1988 **Price:** \$20.00 **Platforms:** TS 2068

ScreenMate

Interface Innovations **Date:** 1983 **Price:** \$49.95 **Platforms:** TS 1000

Light pen and interface with Atari joystick port.

Slow Mode for 4K ROM

Advanced Digital Innovations **Date:** 1983 **Platforms:** ZX80

Turn ZX80/MicroAce into a machine more powerful than the ZX81, e.g., run with either 4K or 8K ROMs.

Smart Rabbit

Hobby Robot **Date:** 1984 **Price:** \$329.95 **Platforms:** TS 1000

Household robot with upgradable, transportable electronics and software to a full-size, man-rated domestic robot. Plug compatible with Timex/Sinclair.

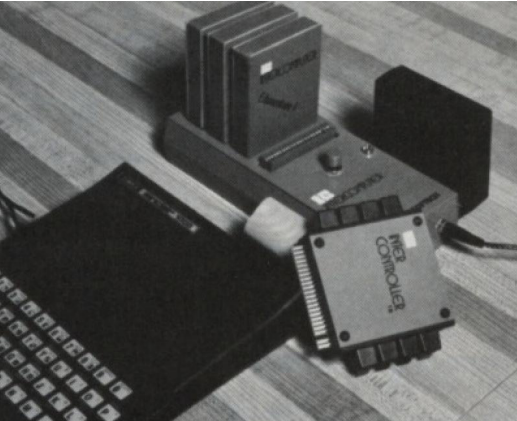
Softbox

Intercomputer, Inc. **Date:** 1983 **Price:** \$59.95 **Platforms:** TS 1000

Expansion port contains 4 software selectable cartridge connections.



Bingel RMP 2000.



Intercomputer Softbox

ST-50 Buffered Motherboard
Sigma Technology **Date:** 1983 **Price:** \$149.95 **Platforms:** TS 1000

Expansion base for Sigma Technology modules.

Timebox
VAL Corporation **Date:** 1983 **Price:** \$199.00 **Platforms:** TS 1000

Modular expansion system. Base system included metal cabinet, detachable keyboard, motherboard with four slots, power supply. Options included 32K and 64K RAM, Centronics interface, RS232 interface, floppy disk, modem, 80 column video and CP/M.

TS 2060 Bus Expansion Unit
Timex Computer Corporation **Model:** TS 2060 **Date:** 1984 **Price:** \$120.00 **Platforms:** TS 2068

The TS 2060 bus expansion unit was designed to expand the TS 2068 into a full-fledged computer. It would have included buffered bus expansion, RS232-C serial and Centronics parallel ports, a port for an extra 32K RAM to support a CP/M mode, RGB color monitor output with audio, a networking facility for connecting up to 64 TS 2068s and controller for up to 8 micro-drives.

Timex displayed this product at the 1984 Consumer Electronics Show in Las Vegas.

According to Bill Skyrme, the BEU had completed engineering and was ready for production. With a built-in floppy disk interface, Timex planned to sell external 3.5" drives (in little silver boxes) for as little as \$49.95. The plan was far enough along that Timex had a supplier lined for the drives.

TS2068 Dock EPROM Boards
Mechanical Affinity **Price:** \$10.00 **Platforms:** TS 2068

Can be used for TS 2068 program on EPROM, configured for use as non-volatile memory (32K to 128K), or as RAM disk.

TSPlus
DO LOOPS Computer **Date:** 1983 **Price:** \$279.95 **Platforms:** TS 1000

Expansion system for the ZX81/TS 1000. Included full keyboard. Additional features included direct video, battery backup, loading filters, expanded memory and STD Bus interface.

No evidence that it was actually produced.

Vpp Power Supply
John Oliger Co. **Price:** \$15.95 **Platforms:** TS 2068

This small single sided board provides 4.4 volts, 21 volts, and 25 volts DC for use with any programmer offered by the John Oliger Co.

This circuit is designed to put as little stress on the EPROM as possible during programming and is recommended for use with these programmers. The board is supplied with schematic, assembly instructions, and use instructions.

TS 2040 printer's power pack may be used as substitute for transformer with suitable connector.

Weather Station
Zunk Custom Electronics **Date:** 1988 **Price:** \$450.00 **Platforms:** TS 2068

Complete weather station with custom hardware. Features include rain gauge with 1/10 inch resolution, wind speed, wind direction, barometric pressure, inside and outside temperature, outside light level and real time clock.

Board comes with 32K RAM, used by the weather station software, and sockets for up to 256k RAM expansion that can run in the DOCK or EXROM bank.

Clock is battery-backed to retain time and date. Software has many features, including a software oscilloscope. Eight user-programmable analog inputs with settable high and low voltage reference points so that 8-bit resolution can be obtained over a very narrow range.

Wireless Digital Thermostat
Compu-Pak **Date:** 1983 **Price:** \$89.95 **Platforms:** TS 1000

Expansion for the Compuboard system.

X-1 Home Robot Kit
Robot Shack **Date:** 1983 **Price:** \$299.95 **Platforms:** TS 1000

Moves at speed of slow walk; on-board computer control by TS 1000. Hearing sense, human-approaching detection and alarm. Obstacle sensing, ambient light sensing. 8 channel remote radio control. Connect to TV and play games through the robot.

Z-Clock
Zebra Systems, Inc. **Model:** C400 **Date:** 1986 **Price:** \$39.95 **Platforms:** TS 2068

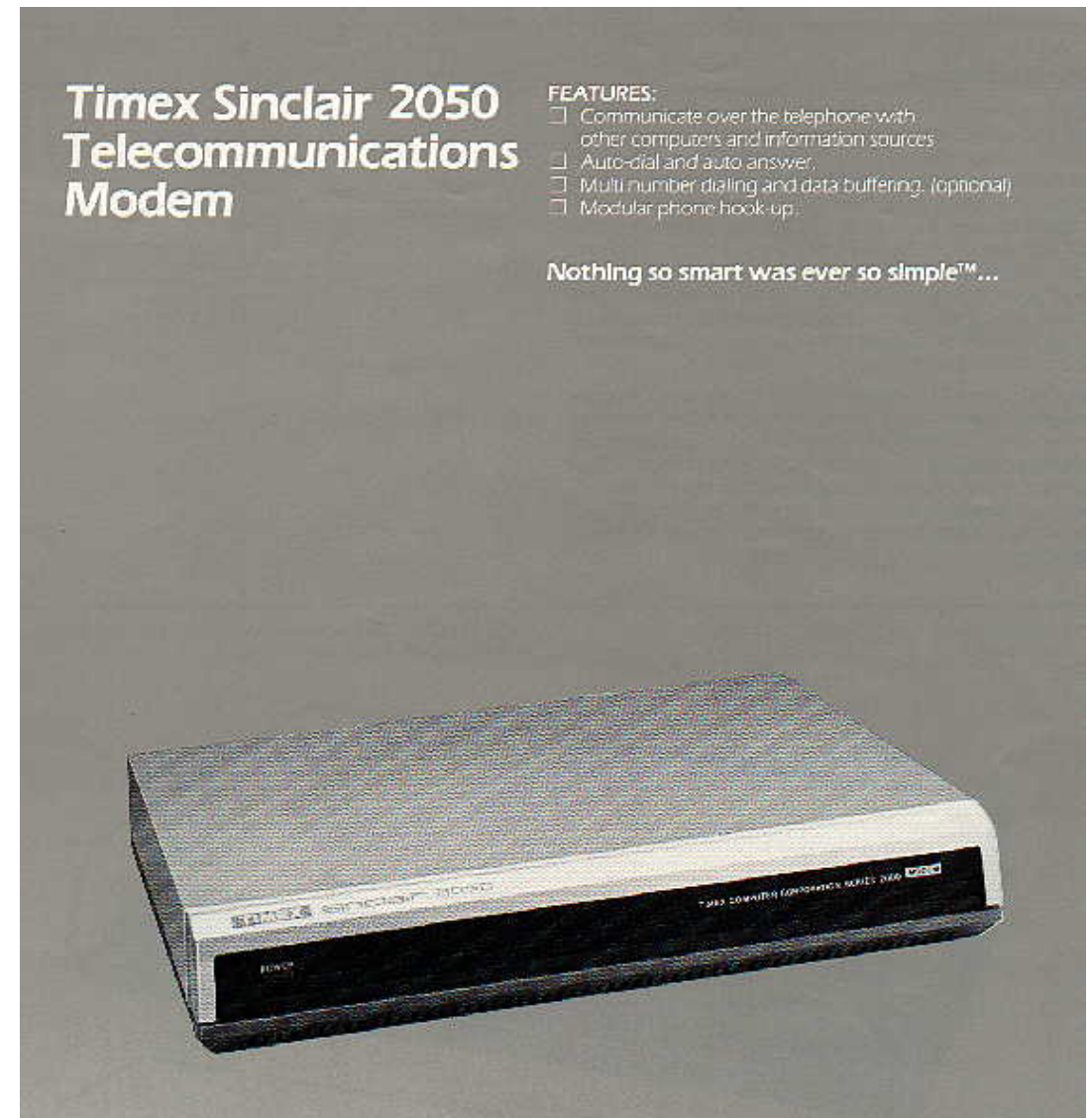
The Z-Clock's built-in battery back-up feature lets you keep track of time even when your computer is turned off. When you turn on your TS 2068, the Z-Clock can tell it the year, month, date, day of the week, and time of day down to the tenths of a second. Features a 64-pin bus extension connector.

ZT21000
Proprietary International **Price:** \$200.00 **Platforms:** ZX81, TS 1000

Expansion unit for ZX81/TS 1000. Promised 64-key auto-repeat big keyboard, 15 colors, 32K RAM onboard, 3 kinds of sound, 33 new BASIC commands, multiple statement and input lines, 6 video pages, high resolution (256x192 pixels) and animation capabilities, user-definable characters and character sets and up to 9 user-definable functions. RS232 and parallel interfaces, two Atari-compatible joystick ports and a PROM cartridge port. Saves and loads at 1.5Kbaud.

ZX81 Workstation
Jim Griner **Price:** \$39.50 **Platforms:** TS 1000

Stand that holds ZX81, provides an angled stand for the TV, conceals cassette leads and power supply. Includes power switch.



MODEMs and RS232 (serial) Interfaces

The 1980s was the decade when home computer users started to “get online” in earnest. Business users, academics and select others had accessed corporate mainframe computers from home but home computer users were limited in what they could access.

That changed with the advent of bulletin board systems and consumer access to commercial computing service providers during off-hours. Compuserve and The Source, two major online systems, both became available to consumers at the end of the 1970s.

Connecting the Sinclair computers to external serial devices opened up the world of online services, bulletin boards and access to serial printers and other special serial devices.

232 Modem

Cobra Technology Limited **Date:** 1983
Price: \$79.95 **Platforms:** TS 1000
Modem that connects directly to the computer.

Data Communications Pack-
age

Intercomputer, Inc. **Price:** \$197.95
Platforms: TS 1000
300 baud modem, RS-232 interface.

FDD Serial Printer Cable

Zebra Systems, Inc. **Model:** C505
Date: 1986 **Price:** \$19.95 **Platforms:**
TS 2068

IF/Firmware Card

Silicon Mountain Computers **Date:**
1988 **Price:** \$24.95 **Platforms:** TS
1000, TS 2068
Low-footprint card to replace original in-
terface of Westridge/Timex 2050 modems.
26-pin header connects to modem and in-
cludes 8K EPROM socket. Through-con-
nector for peripheral chaining.

Interface to the Real World

Edward W. Loxterkamp **Date:** 1985
Price: \$25.95 **Platforms:** TS 1000
RS-232 interface and parallel input/out-
put device.

Kradle Communicator

K-2 Electronics **Date:** 1983 **Price:**
\$75.00 **Platforms:** TS 1000
An add-in expander for the Kradle, pro-
viding RS232 and printer/output ports, com-
munication to modem or remote computer
plus standard parallel output (8 bit) port
with handshaking, hardware UART, soft-
ware BAUD select, vectored interrupt capa-
bility. Requires no memory space; I/O
mapped.

MD-1 Modem

Byte-Back Co **Model:** MD-1 **Price:**
\$99.95 **Platforms:** ZX80, ZX81, TS
1000
Includes RS-232 port.

MD-2B Modem

Byte-Back Co **Model:** MD-2B **Price:**
\$149.95 **Platforms:** ZX81, TS 1000
Works with any amount of memory on
the 1000; with 64K will store 60 screens.
Terminal software included. Prints to 2040
or any serial printer via built-in RS-232 port.

MD-68 Modem

Byte-Back Co **Model:** MD-68 **Date:**
1985 **Price:** \$149.95 **Platforms:** TS
2068
300 baud. RS-232 port.

Memopak RS-232

Memotech **Price:** \$139.95 **Platforms:**
TS 1000
Interface allows the Timex to connect to
serial printers and peripherals.

The interface has two main modes of
operation: BASIC mode allows you to use
the range of functions supplied in the
RS232 EPROM with an ordinary BASIC
program. TERMINAL mode allows you to
use your Timex as a terminal to another
processor.

The EPROM functions offered permit
the user to send, receive and convert bytes
between Z80 code and ASCII, as well as
check the status of numerous control flags.
Received or transmitted data can appear si-
multaneously on the screen, and received
data may be printed simultaneously.

MKIV Modem

E. Arthur Brown Company **Model:**
MKIV **Date:** 1983 **Price:** \$190.00 **Plat-**
forms: TS 1000
300 baud modem. Housed in a case
similar to Memotech cases.

Modem

CAI Instruments, Inc. **Price:** \$129.95
Platforms: TS 1000
May have been a standard modem;
CAI/O Board had RS-232.

Hardware

Network Communications Package

CAI Instruments, Inc. **Date:** 1983 **Price:** \$149.95 **Platforms:** TS 1000
ASCII firmware, modem and modem cable. This with the CAI/O board allows the TS 1000 to communicate with mini and mainframe computers.

Phone Modem

Synchronize **Date:** 1982 **Price:** \$3.50 **Platforms:** TS 1000
Plans for building a modem.

RS-232

Synchronize **Date:** 1982 **Price:** \$3.50 **Platforms:** TS 1000
Plans to build a RS-232 serial interface.

RS-232 for 2068

Byte-Back Co **Model:** RS-232-68 **Date:** 1985 **Price:** \$69.95 **Platforms:** TS 2068
Connect serial devices to the TS 2068. Driver software supports LPRINT and LLIST.

RS-232 Interface

Compu-Pak **Date:** 1983 **Price:** \$44.95 **Platforms:** TS 1000
Expansion for the Compuboard system.

RS-232 Module

Byte-Back Co **Model:** RS-232 **Price:** \$59.95 **Platforms:** TS 1000
Connect to RS232 printers and terminals. USR calls simulate LPRINT, LLIST and COPY commands.

RS-68 RS-232 Interface

AERCO **Date:** 1985 **Price:** \$99.00 **Platforms:** TS 2068
Compatible with most modems and printers. Two RS-232 interfaces; connect two devices at once. 300-19,200 baud.

RS232C Interface

Cobra Technology Limited **Date:** 1983 **Price:** \$50.00 **Platforms:** TS 1000
Variable baud rate by software control. Upper and lower-case printout. Up to 120

characters per line with software control. Handshake facility. Output via 2 small jack sockets.

Serial Output Port Kit

Cosmonics **Model:** CH 21/CH 21K **Price:** \$15.00 **Platforms:** TS 1000
Plans and parts to build a serial output port using two integrated circuits. Plans also available separately.

Serial Printer Interface

Cinagro Software **Date:** 1982 **Price:** \$5.00 **Platforms:** TS 1000
Output RS-232 ASCII through MIC port. Software is 280 bytes of relocatable machine code; provides printing of characters, strings, program listings, and screen copying. Plans and listing.

The Terminal

Silicon Mountain Computers **Date:** 1988 **Price:** \$119.00 **Platforms:** TS 1000, TS 2068
Complete (hardware and firmware) communications package. Consists of 2050 modem, modem interface/firmware card, and ZX-TERM*80 EPROM.

TS 2050 Modem

Timex Computer Corporation **Model:** TS 2050 **Date:** 1983 **Price:** \$99.95 **Platforms:** TS 1000, TS 2068
One of the most eagerly awaited accessories was the TS 2050 Telecommunications Modem. Timex announced a modem, scheduled for release in November of 1983, that was compatible with the TS 1000/1500, ZX-81 and TS 2068. The modem is also known as the Westridge 2050.

Unfortunately, Timex exited the computer market before they received the first shipment.

At the same time, Stuart Lotwin, president of Westridge Communications, passed away. Westridge was sold to Anchor-Automation, the company that produced the modem software. Anchor released the modem not long after.

The cassette that comes with the modem (SMART TERMINAL 1) has the T/S 1000/1500 software on one side, and the T/S 2068 software on the other. An advanced version of this software, called SMART TERMINAL II, allows for the storage of up to fourteen telephone numbers with log-on instructions and the ability to upload and download.

It attaches to the computer via a 12 inch cable which ends in a Timex interface that connects to the expansion bus. The connector is of the piggy-back type so that other peripherals may be added.

Timex displayed this product at the 1984 Consumer Electronics Show in Las Vegas.

TTL Serial Input/Output Port Package

Cosmonics **Date:** 1983 **Price:** \$26.00 **Platforms:** TS 1000
Software and plans for building input and output ports which fit inside a ZX81 or TS 1000. When used with an RS232/TTL level converter, can connect to most RS232C peripherals.

WC2050 Modem Board

Zebra Systems, Inc. **Model:** W251 **Date:** 1986 **Price:** \$10.00 **Platforms:** TS 1000, TS 2068
Untested and uncased modem board.

WC2050-to-RS232 Kit

Zebra Systems, Inc. **Model:** C183 **Date:** 1986 **Price:** \$19.95 **Platforms:** TS 1000, TS 2068
Complete kit consisting of small printed circuit board, 3 ICs, DB9 connector and instructions. Turns WC2050 into true RS232.

WC2050-to-RS232 PC Board

Zebra Systems, Inc. **Model:** C184 **Date:** 1986 **Price:** \$5.95 **Platforms:** TS 1000, TS 2068
PC board and instructions to turn WC2050 into true RS232 interface.

Hardware

Westridge 2050 Modem

Westridge Communications **Model:** WC250 **Date:** 1985 **Price:** \$119.00 **Platforms:** TS 1000, TS 2068
Original manufacturer for the Timex 2050 modem. Released after Timex left the market.

Z-SI/O RS-232 Interface

Ed Grey Enterprises **Date:** 1989 **Price:** \$24.50 **Platforms:** TS 2068
Serial interface compatible with the TS 2050/WC 2050 modem. Includes 25-pin RS-232 connector. Uses Intel 8251 USART, the same chip as in the Timex modem, and supports up to 1200 baud modems and 19,200 baud direct connections.

Three versions were available: JLO for use with John Olinger disk systems, AERCO for use with the FD-68 disk system, and a “stock” version for everything else. The JLO version used ports 9Fh and BFh, the AERCO used D7H and DFh and the stock used the same ports as the TS 2050, 73 and 77h.

Came with a 26 page user manual and a 14 page software development guide that included printer/plotter drivers and terminal emulation listings.

ZX-98 Parallel and Serial Interface

Data-assette **Date:** 1982 **Price:** \$99.95 **Platforms:** TS 1000
Parallel and serial interface (Centronics printer and RS-232) on the same board. Supports LLIST, LPRINT and COPY; communicates at up to 9600 baud. On-board driver routines in EPROM.

Power Supplies and Related Hardware

One of the most immediately obvious ways Sinclair cut costs was in its power supply and regulation circuitry, especially in the ZX81 and TS 1000.

The most trivial of components, a power switch, was omitted from every Sinclair, from the ZX80 to the ZX Spectrum. Users could unplug the power from the computer, from the outlet or use a power strip to switch the power on or off. Inserting a power switch between the power supply and computer was a quick and easy solution.

A bit more challenging was the power supply and voltage regulator. The power supply provided just enough amperage to run the computer and a 16K RAM pack. Anything beyond that required a replacement supply.

The ZX80, ZX81 and TS 1000 computers all suffered from overheating, due in part to the overall design and an undersized heat sink. Replacement power supplies and larger heat sinks were common solutions.

On the positive side, the power requirements of the Sinclair computers were minimal enough that an uninterrupted power supply could be easily made using just a few batteries.

2 amp Power Supply

Hurricane Electronics Lab **Model:** SPS-2A **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000

Heavy duty replacement for the standard Sinclair/Timex supply. Supplies up to two amps to run external memory, printer, I/O modules, and other add-ons. Eliminates black bars and other problems caused by an insufficient power supply. Includes LED power indicator.

Add-A-Switch

Lyon Ware **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Small power switch that inserts between the computer and the power supply. Later called the Lyon Switch.

Baby BBU

SyncWare Co. **Price:** \$39.50 **Platforms:** TS 1000

NiCad battery backup. 30 minute capacity.

Battery backup

R. H. Enterprises **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

Plans or kit to power computer for 25 or more minutes with 1K, 10 or more minutes with 16K.

Battery backup unit

CSI Company **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000

Provides up to 30 minutes of power via D cell batteries. Connects between power supply and computer.

BBU-1

SyncWare Co. **Price:** \$54.50 **Platforms:** TS 1000

Provides up to one hour of power via NiCd batteries. Connects between power supply and computer.



BBU-2

SyncWare Co. **Price:** \$84.50 **Platforms:** TS 1000

Provides more than two hours of power via NiCd batteries. Includes built-in, heavy duty power supply, power indicators and power switch.

Clean Line Power Supply Regulator

H & H Electronics **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000

Pre-regulator conditions the incoming DC voltage from the ZX/TS power pack into the minimum required to operate the computer. Also included is a system reset switch.

Control Module

Dynamic Designs **Date:** 1983 **Price:** \$27.50 **Platforms:** TS 1000

Power switch, ON indicator, load/save isolation switch with load level monitor and reset control. Isolation switch prevents feedback during program save. Reset allows recovery from crashes without powering down peripherals.

Easy Z Heat Eliminators

Sensible Technical Solutions **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

Engineered heat transfer solution. No modification to interior of computer.

HL-1205 Power Supply

Hurricane Electronics Lab **Price:** \$35.95 **Platforms:** TS 1000

Switching power supply. Use with 12v battery for UPS.

Hardware

Improved Heat Sink
BASCO **Date:** 1982 **Price:** \$7.95 **Platforms:** TS 1000

Machined from aluminum alloy. 50% thicker and more than twice the surface area of the original part.

In-Line Voltage Dropper
M. C. Hoffman **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Lowers voltage provided to computer so it runs cooler.

On/Off switch
Indiana Software Group Inc. **Date:** 1983 **Price:** \$5.95 **Platforms:** TS 1000
Kit with parts.

On/Off Switch
Bytes & Pieces **Date:** 1984 **Price:** \$15.95 **Platforms:** TS 1000
Includes circuitry to improve reliability of loading software from cassette.

Overvolt protection
Arnold J. Gold **Date:** 1982 **Price:** \$15.00 **Platforms:** ZX80, TS 1000
Protect all ZX80/81 ICs if voltage regulator fails by crowbar and fusing.

Power Line Control
H & H Electronics **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Provides regulated DC power. Power switch with a visual indicator and push button system reset that allows convenient system reset or power up/down.

Power Line Filter/Suppressor Module
Hurricane Electronics Lab **Model:** LFS-5A **Date:** 1983 **Price:** \$34.95 **Platforms:** TS 1000
Protects against pulsed, continuous and/or intermittent radio frequency interference which can cause malfunctions in electronic equipment. Also protects against high voltage transients and surges such as those produced by lightning, switching surges, and noise spikes. Includes power

switch, pilot light, 5 amp fuse and two protected outlets.

Power Paw Power Function Unit
Sync-Lair, The **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Plug-in unit, twice the size of its 9V rechargeable battery. Provides power/RE-SET switch, up to 15 minutes of battery back-up, and a power LED (green for line, red for battery).

Power Saver 1000
H & Z Electronics **Date:** 1984 **Price:** \$39.95 **Platforms:** TS 1000
Battery back-up unit, rechargeable batteries.

Power Supply
Synchronize **Price:** \$5.00 **Platforms:** TS 1000
Design and build your own supply to fit your needs. Includes how to estimate both present and future needs and covers both single and multiple-voltage.

Power Supply
Integrated Data Systems **Date:** 1983 **Price:** \$17.00 **Platforms:** TS 1000
9 volt, 1 amp power supply for ZX81/TS 1000.

Power Supply
Data-assette **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
650 milliamp power supply with inline power switch.

Power Supply
MacSwan-Packaging Co. **Date:** 1982 **Price:** \$37.50 **Platforms:** TS 1000
Two filtered outputs. Output 1: 5 volts at 1.5 amps; output 2: adjustable from 6.5 to 15 volts at 1.5 amps. Incorporates push button to clear the computer, an LED power indicator and connecting plug and cable. Overcomes problem of heat in the original power pack.

Hardware

Power Supply Buffer
Cobra Technology Limited **Date:** 1983 **Price:** \$22.00 **Platforms:** TS 1000
Battery-backed power supply buffer; supplies 9 volts for up to 30 minutes. Fits between computer and power supply, recharges automatically.

Power Switch
K. Roberts **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Eliminates wear on power jack. 3.25 x 2 x 1 inch black case with heavy duty rocker switch.

PSU 9v 2 amp
Fuller Micro Systems **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Mounts inside Fuller keyboard.

SPS
Research in Speech Technology (R.I.S.T.) Inc. **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000
Nine volt, two amp power supply. Provides all power needed for expanded system operation.

Surge Clamping Diodes
Matthew Zenkar **Date:** 1983 **Price:** \$4.50 **Platforms:** ZX80, TS 1000
Prevent voltage overage.

Sync Saver SVR-1
Luxtron Inc **Date:** 1982 **Price:** \$49.00 **Platforms:** TS 1000
Battery backup power supply. Rechargeable NiCad batteries.

Sync Saver SVR-2
Luxtron Inc **Date:** 1982 **Price:** \$17.50 **Platforms:** TS 1000
Battery back-up power supply; alkaline batteries.

The Cooler
Support Systems One **Date:** 1983 **Price:** \$11.00 **Platforms:** TS 1000
Pre-regulator. Output rated at 1.5 amps; input rated at 9-35 VDC.

UPS-1
UPSystems **Price:** \$14.95 **Platforms:** TS 1000
Battery-powered backup system. Power supply plugs into module, computer is powered from module. Activated by drop in voltage from power supply. On/off/reset switch. Uses two standard 9 volt batteries. UPS-1M includes program loading monitor to solve tape loading problems.

UPS-2
UPSystems **Price:** \$29.95 **Platforms:** TS 1000
Battery-powered backup system. Power supply plugs into module, computer is powered from module. Activated by drop in voltage from power supply. On/off/reset switch. Use rechargeable NiCad batteries. UPS-2M includes program loading monitor to solve tape loading problems.

WITWATT 1000
WT Associates **Date:** 1983 **Price:** \$36.50 **Platforms:** TS 1000
Battery back-up uninterruptible power supply. Up to 7 hours operation, 4 hours with 16K.

ZX81 Improved Heatsink
B. Sanzone **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000
Prevents system crashes caused by overheating voltage regulator.

ZXPS/1
Support Systems One **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000
Heavy duty power supply designed for the ZX81 or TS 1000. Fully regulated, rated at 1.5 to 2 amps. Made to supply enough power for the ZX81 or TS 1000 and any add-on.



Printers and Printer Interfaces

For a brief time, the Sinclair ZX Printer was the only option available to Sinclair owners and it was only available in England. It printed by burning aluminum-coated paper, producing an interesting result. As with all Sinclair products, it was an idiosyncratic offering. Not only did it require special paper, the paper was supplied on 100mm (4") wide rolls.

Timex contracted with Alphacom to supply one of their printers, the Alphacom 32, as the Timex 2040 printer. Like the ZX Printer, it printed on narrow (4.3" wide) rolls of special thermal paper.

Obviously, neither of these solutions could produce "business quality" documents.

Since Sinclair computers did not have built-in printer interfaces. Instead, the Sinclair printers connected to the expansion bus.

The aftermarket provided a variety of interfaces to the two most common printer communication protocols, Centronics (parallel) and RS-232 (serial). These interfaces also connected to the expansion bus.

2068 Centronics Printer Interface

Hacksel Electronics **Date:** 1986 **Price:** \$49.95 **Platforms:** TS 2068

Printer interface that was available as cartridge port or rear edge connector models. Worked with Centronics printers, allows full page, hi-res color screen copies using a gray scale and is compatible with software designed for AERCO and Tasman interfaces as well as Omnicalc II, Vu-Calcul, and Vu-File.

2068 Parallel Printer Port
John Oliger Co. **Price:** \$33.95 **Platforms:** TS 2068

Printer port for printers that have a Centronics interface. Uses the same port and BUSY bit as the AERCO 2068 printer interface. Port is fully decoded and contains a "PRINTER READY" LED to show printer current status.

Also included are hi-res screen dumps for Okidata, Olivetti PR2300, Gemini 10X and Gorilla Banana printers.

2068/1520 Printer Interface
John McMichael **Date:** 1987 **Price:** \$20.95 **Platforms:** TS 2068

Interface to connect a TS 2068 to the Commodore 1520 plotter. Later available with driver for Okimate 20 printer.

The Commodore 1520 was a small, four color pen plotter, built on an ALPS DPG1302 plotter mechanism. The same mechanism was used in the Atari 1020, the Radio Shack CGP-115 and a number of others.

Supplied with a printer driver on cassette. Available as a bare board, a kit and assembled and tested.

Alphacom 32 Printer

AlphaCom **Platforms:** ZX81, TS 1000, TS 1500, TS 2068

OEM for Timex/Sinclair 2040 printer.

Brother EP-20 Adapter

Jon Glazer **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

Schematics and information on electronic and mechanical principles of operation.

CAI/P40 Printer

CAI Instruments, Inc. **Price:** \$139.95 **Platforms:** TS 1000

40-column thermal printer that prints all TS 1000 and ZX81 alpha-numerics and graphics. Used with either a mini-interface (\$20) or the CAI/O board. Printer has six modes of print: screen dump, print listing, and print string, each of which may be printed in normal or expanded style.

Centronics Interface

Cobra Technology Limited **Date:** 1983 **Price:** \$50.00 **Platforms:** TS 1000

Parallel printer interface.

Centronics Interface

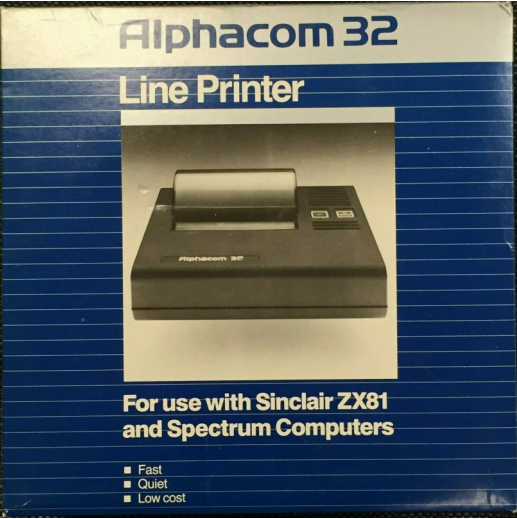
Sinclair Place **Date:** 1983 **Price:** \$69.00 **Platforms:** TS 1000

Interface for standard parallel printers. Manufactured by Indescomp.

Centronics Parallel Printer Interface

Compu-Pak **Date:** 1983 **Price:** \$44.95 **Platforms:** TS 1000

Expansion for the Compuboard system.



Hardware

Centronics Printer Interface

Professional Electronics **Date:** 1982 **Price:** \$135.00 **Platforms:** TS 1000
Uses ports A and B of the I/O board. Printer commands and machine language programs are stored in an 8K memory area not used by computer. Professional Electronics I/O board required.

Centronics Printer Interface

Research Service Labs **Date:** 1986 **Price:** \$50.00 **Platforms:** TS 2068

CGP-115 Driver and Interface

Softest **Date:** 1983 **Price:** \$75.00 **Platforms:** TS 2068, ZX Spectrum
Connect Spectrum to Tandy CGP-115 four color printer/plotter. Scans screen horizontally and sends printer information to Tandy printer. Colors mapped to printer's four colors. Can be used with TS 2068 and twister board.

CP-68 Centronics Printer Interface

AERCO **Date:** 1985 **Price:** \$69.00 **Platforms:** TS 2068
Connect to parallel (Centronics) printers. Print in either the printer's native font or the TS 2068 display font.

CP-ZX Centronics Printer Interface

AERCO **Model:** CP-ZX **Date:** 1982 **Price:** \$119.00 **Platforms:** ZX81, TS 1000
Smart printer interface that can auto-boot disk system, set RAMTOP and disable Memotech control characters in some software.

CRC Smart Soft Face

CRC Software **Date:** 1983 **Price:** \$109.95 **Platforms:** TS 1000
Interfaces printers to the Sinclair. Serial or parallel. Uses no RAM nor USR routines. Works with any printer, single key operations.

FootePrint

Foote Software **Date:** 1985 **Price:** \$45.00 **Platforms:** TS 2068
Cartridge dock interface. Compatible with print driver software for the AERCO/Oliger and Tasman B and C. Includes the card, ribbon cable and software on cassette. Spare socket and switch to run either a Spectrum ROM or other EPROM-based software.

The article "2068 Printer Interface and ROM Cart" (appears in Best of SUM) documents how to make this board.

Memopak Centronics I/F

Memotech **Date:** 1982 **Price:** \$104.95 **Platforms:** TS 1000
Centronics parallel interface pack enables the Sinclair to use a wide range of compatible printers. The resident software in the unit gives the ASCII set of characters. Interface provides lower-case character capability.



Mindware MW100 printer.

MW100 Printer

Mindware, Inc. **Date:** 1982 **Price:** \$119.95 **Platforms:** TS 1000
Plain paper, dot matrix printer that printed on 1 3/4 inch paper rolls. Three printing modes:

- Mode 0: Prints each 32 character line using 2 lines on the tape for each screen line.

- Mode 1: Divides the screen in half vertically; prints each; then tape them together for full screen.
- Mode 2: Prints 16 character lines.

Parallel 1000

Byte-Back Co **Date:** 1985 **Price:** \$84.95 **Platforms:** TS 1000
Interface to Centronics parallel interface printers. Driver translates Timex/Sinclair code to 80 column ASCII and sends printer via USR calls to simulate LPRINT, LLIST and COPY.

Parallel 2068

Byte-Back Co **Date:** 1985 **Price:** \$84.95 **Platforms:** TS 2068
Interface to Centronics parallel interface printers. Driver software supports LPRINT and LLIST. High resolution screen copy program supports multiple printers.

Parallel Printer Port

John Oliger Co. **Date:** 1984 **Price:** \$20.95 **Platforms:** TS 1000
This project was detailed completely in Syntax Quarterly, issues 1 & 2. Port is memory mapped at location FFFFh and is completely decoded. Project includes schematic, theory of operation sheet and machine code listing comments of a copy routine for use with the Okidata ML80 and ML82A printers. Circuit and software can be adapted to most other Centronic compatible printers.

To achieve full use of the BASIC printer commands, the Sinclair ROM must be patched by putting it in EPROM.

PERICONc

BASICare Microsystems, Inc. **Model:** B29 **Date:** 1983 **Price:** \$74.95 **Platforms:** TS 1000
Centronics printer interface. A module in the BASICare Modular Expansion System.

Hardware

PI2040 Printer Interface

Compumentor **Date:** 1983 **Price:** \$37.50 **Platforms:** TS 1000
Solves the interface problem of connecting the TS 2040 printer to a TS 1000 computer with Memotech or other non-Timex add-ons.

Printer Interface

Rheesware **Platforms:** TS 2068
Serial and parallel printer interfaces that plug into the 2068 joystick ports.

Serial Interface

Sinclair Place **Date:** 1983 **Price:** \$69.00 **Platforms:** TS 1000
Interface for RS-232 serial devices. Manufactured by Indescomp.

SMC CPI-1 Printer Interface

Silicon Mountain Computers **Date:** 1988 **Price:** \$24.95 **Platforms:** TS 1000
Updated version of Tasman B printer interface with more decoding to improve compatibility with both TS 1000 and TS 2068 computers.

Super ROM Board

Audio Vision **Date:** 1983 **Price:** \$69.00 **Platforms:** TS 1000
Built-in printer interface, EPROM burner and autostart ROM.

T.A.S. Fix

R & R Electronics **Date:** 1986 **Price:** \$29.95 **Platforms:** TS 2068
Device for the TS 2068 and Tasman parallel printer interface. Disables Tasman device to allow use of incompatible hardware and software.

Tasman Printer Interface

Tasman Software **Date:** 1984 **Price:** \$69.96 **Platforms:** TS 2068
Available in Centronics and RS-232 versions. Supplied with 3' cable and driver software.

TS 2040 Printer

Timex Computer Corporation **Model:** TS 2040 **Date:** 1983 **Price:** \$99.95 **Platforms:** TS 1000, TS 2068

The 2040 printed on 4.3" wide thermal paper in 32 columns. All Timex computers could print individual lines (LPRINT), list programs (LLIST) or dump the screen (COPY) to the printer.

The 2040 was build by Brown Kellog's subsidiary, Alphacom. They later marketed the same printer as the Alphacom 32.

TS 2080 80 Column Printer

Timex Computer Corporation **Model:** TS 2080 **Date:** 1984 **Price:** \$325.00 **Platforms:** TS 2068

The TS 2080 was a full-size printer the provided 80 columns of dot matrix output, including all the characters in the TS 2068. It would have plugged into a Centronics parallel printer port on the 2060 bus expansion unit. According to one vendor, it was a Cal-Abco Legend 880 printer. E. Arthur Brown claimed it was a Mannesmann-Tally MT-80 in one of his catalogs.

WIDGIPRINT Printer

CAI Instruments, Inc. **Price:** \$99.95 **Platforms:** TS 1000

32 column thermal printer; prints on 3.2" wide paper. Supports Sinclair BASIC printing commands and screen dump.

ZX Printer

Sinclair Research Ltd. **Date:** 1982 **Price:** \$99.95 **Platforms:** ZX80, TS 1000

Designed exclusively for use with the ZX81 (and ZX80 with 8K BASIC ROM), the printer offers full alphanumerics and highly sophisticated graphics.

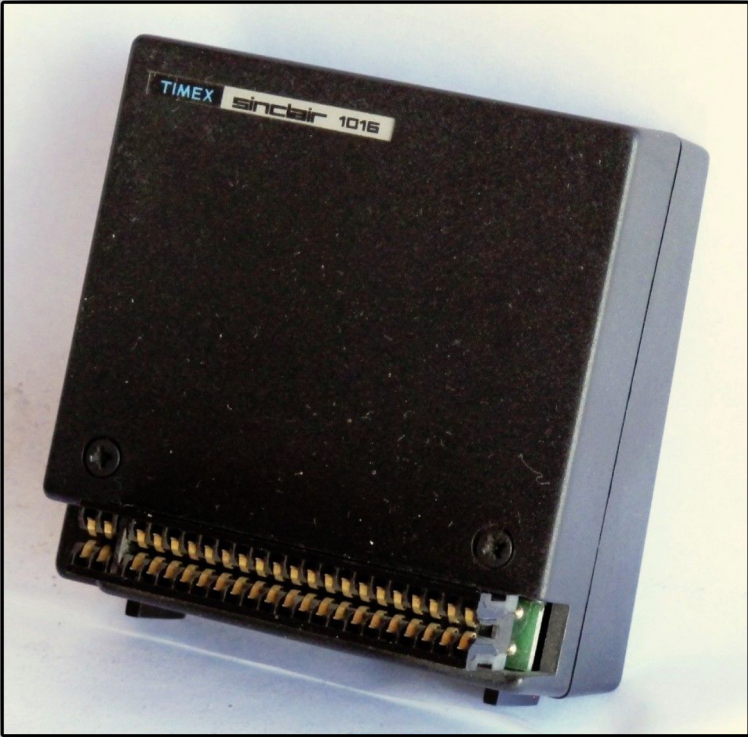
COPY command prints out exactly what is on the whole TV screen.

Printing speed is 50 characters per second, with 32 characters per line and 9 lines per vertical inch.

ZX-98 Parallel and Serial Interface

Data-assette **Date:** 1982 **Price:** \$99.95 **Platforms:** TS 1000

Parallel and serial interface (Centronics printer and RS-232) on the same board. Supports LLIST, LPRINT and COPY; communicates at up to 9600 baud. On-board driver routines in EPROM.



RAM Memory Expansion

While resourceful owners could accomplish a lot with the 1K or 2K of RAM built in to their computers, more serious uses required more RAM. Sinclair and Timex offered 16K RAM units for the ZX80, ZX81 and TS 1000 computers. For many, that was enough.

A huge number of expansion RAM packs were produced for the Sinclair computers. Some extended beyond the default 16K, others claimed to address the “RAM pack wobble” problem and others made RAM available in special locations or configurations or had other special features.

1-3K Memory Expansion

Haven Hardware **Date:** 1981 **Price:** \$15.00 **Platforms:** ZX80
Uses static RAM.

16-32-48K expanda RAM

Dancer **Date:** 1982 **Platforms:** TS 1000
Fits inside case.

16K or 32K RAM Plans

T. W. Cook **Date:** 1982 **Price:** \$5.00 **Platforms:** ZX81, TS 1000
Plans to expand 1K model to 16K or ZX81 with 16K to 32K for under \$30. Fits inside ZX81.

16K RAM

Sinclair Research Ltd. **Price:** \$99.99 **Platforms:** ZX80, TS 1000

16K RAM

Sinclair Place **Date:** 1983 **Price:** \$54.00 **Platforms:** TS 1000
Gold-plated connectors and power LED. Manufactured by Indescomp.

16K RAM (internal)

DK'tronics **Price:** \$39.50 **Platforms:** TS 1000
Internal RAM expansion for keyboard.

16K RAM Pack

Audio Vision **Date:** 1983 **Price:** \$34.90 **Platforms:** TS 1000

16K RAM Pack

Suntronics **Model:** MX-16KP **Date:** 1983 **Price:** \$49.95 **Platforms:** TS 1000

16K RAM Pack

Gladstone Electronics **Model:** G16 **Date:** 1983 **Price:** \$49.95 **Platforms:** TS 1000

16K RAM Pack

Compu-Pak **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000
Expansion for the Compuboard system.

16K RAM Pack

DK'tronics **Price:** \$65.00 **Platforms:** TS 1000
Available with or without a case.

16K RAM Pack

JRS Software **Date:** 1982 **Price:** \$69.95 **Platforms:** TS 1000

16K RAM Pack

KB Enterprises **Date:** 1982 **Price:** \$49.95 **Platforms:** TS 1000

16K RAM Pack

Kayde Electronic Systems Ltd. **Date:** 1982 **Price:** \$59.90 **Platforms:** TS 1000
Works on Sinclair power supply.

16K RAM Pack

Laserscan Electronics Corp. **Date:** 1983 **Price:** \$44.95 **Platforms:** TS 1000
Highly crash resistant RAM pack that can be mounted inside the computer under the keyboard or plugged into the rear connector. Requires no extra power supply; comes with a special high pressure edge connector.

16K RAM Pack

Ground Control **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000
Injection molded plastic case; overcomes wobble and disconnection problems characteristic of other units; optional extra is a keyboard sounder giving audible feedback when a key is pressed.

16K RAM Pack

Computer Add-Ons **Model:** ME16 **Date:** 1983 **Price:** \$32.00 **Platforms:** TS 1000
RAM pack physically similar to TS 1016. Claims not to suffer from wobble.

16K RAM Pack

RKL Systems **Model:** RKL-16 **Date:** 1982 **Price:** \$89.95 **Platforms:** ZX80, TS 1000
Expandable to 32K.

Hardware

16K RAM Pack

Namal Associates **Date:** 1982 **Price:** \$35.00 **Platforms:** TS 1000
No enclosure RAM pack.

16K RAM Pack

Dolphin Computer **Price:** \$49.95 **Platforms:** TS 1000

16K RAM plus Expansion Board

MicroAce **Price:** \$149.00 **Platforms:** MicroAce
3 slots with extra power supply. 4K or 16K.

1K RAM Board

Quicksilva **Price:** \$20.00 **Platforms:** ZX80
Static RAM; expands internal memory to 2K.

2K Memory Upgrade

Cosmonics **Date:** 1982 **Price:** \$20.00 **Platforms:** ZX81
Kit to increase the ZX81 to 2K.

2K RAM Board

Quicksilva **Price:** \$30.00 **Platforms:** ZX80
Static RAM; expands internal memory to 3K.

2K RAM Pack

DK'tronics **Date:** 1981 **Price:** \$24.00 **Platforms:** ZX80, ZX81, TS 1000
Static RAM expansion; works with built-in RAM.

2K RAM Upgrade

Micro Logic Corp **Date:** 1982 **Price:** \$29.95 **Platforms:** ZX81
Upgrade for 1K ZX81. Includes 2K RAM chip, socket, jumper and instructions.

2K RAM Upgrade

Powertronix Electronics **Date:** 1983 **Price:** \$11.95 **Platforms:** ZX81
Internal upgrade; replaces existing RAM chips.

2K to 24K Memory Expansion

JST Enterprises **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000
Plans to expand memory up to 24K, using 2K RAM chips, placed anywhere from 8192 to 32768.

32K Internal RAM Modification

Zunk Custom Electronics **Date:** 1988 **Price:** \$35.00 **Platforms:** TS 2068
32k RAM inside the 2068, in the upper half of the DOCK and EXROM bank. RAM is active in the DOCK and/or EXROM bank, allowing user to save files that reside in the DOCK bank. Can also load files directly into this RAM from tape. Switch to disable the RAM in the DOCK bank so other peripherals can use the address space.

32K Non-Volatile Memory RAM Board/Cartridge

Thomas B. Woods **Date:** 1986 **Price:** \$109.95 **Platforms:** TS 2068
Plugs into the TS 2068 cartridge slot. On board battery keeps it alive even when you turn the computer off. Switch selectable for use in the DOCK or EXROM banks with no mods to the computer. Write protect switch lets you use memory like an EPROM. Run your own plug-in BASIC programs. Detailed instructions include utilities for bank switching and data transfers. The perfect tool for extending your 2068's memory or for writing and debugging EPROM software. Designed by Tom Bent.

32K RAM

Sinclair Place **Date:** 1983 **Price:** \$95.00 **Platforms:** TS 1000
Gold-plated connectors and power LED. Manufactured by Indescomp.

32K RAM Cartridge

Knighted Computers **Date:** 1986 **Price:** \$109.95 **Platforms:** TS 2068
Cartridge is switch assignable to either dock bank or EXROM bank. Lithium battery backup, write protect switch.

32K RAM cartridge

Lemke Software Development **Date:** 1989 **Price:** \$47.95 **Platforms:** TS 2068
Expansion RAM, plugs into dock slot.

32K RAM Pack

RKL Systems **Model:** RKL-32 **Date:** 1982 **Price:** \$179.00 **Platforms:** ZX80, TS 1000
Expandable to 64K. RKL joystick systems can be added to this unit.

32K RAM Piggy-Back

Gladstone Electronics **Model:** G32 **Date:** 1983 **Price:** \$99.95 **Platforms:** TS 1000
Can be used standalone or with a 16K RAM for a total of 48K.

3K RAM Board

Quicksilva **Price:** \$40.00 **Platforms:** ZX80, ZX81, TS 1000
Static RAM; expands internal memory to 4K.

48K Memory Extension

Memotech **Price:** \$129.00 **Platforms:** ZX81, TS 1000
Allows ZX81 to run 48K BASIC programs including up to 16K of assembly code. ZX81 sits on custom built case containing the Memotech.

48K RAM for TS2000

Computer Add-Ons **Model:** ME48 **Date:** 1983 **Price:** \$37.00 **Platforms:** TS 2000, TS 2068
Announced before 2068 launched. Manufacturer assumed 2068 would be identical to Spectrum.

48K RAM Pack

RKL Systems **Date:** 1982 **Price:** \$259.00 **Platforms:** ZX80, TS 1000

4K RAM Pack

DK'tronics **Price:** \$35.00 **Platforms:** ZX80, ZX81, TS 1000
Static RAM expansion; works with built-in RAM.

Hardware

64K Dynamic RAM

John Olinger Co. **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000
64K DRAM board for the TS 1000, TS 1500 or ZX81. Special features of this memory include:

- 8-12K on/off switch
- 12-16K on/off switch
- two banks of 8K ram available mapped 8-16K (Bank A/B switch)
- and 48-64K on/off switch

64K RAM

Sinclair Place **Date:** 1983 **Price:** \$135.00 **Platforms:** TS 1000
Gold-plated connectors and power LED. Manufactured by Indescomp.

64K RAM (internal)

DK'tronics **Price:** \$98.50 **Platforms:** ZX81
Internal RAM expansion for keyboard.

64K RAM Pack

CompuTech & Software Industries, Inc. **Date:** 1982 **Price:** \$129.95 **Platforms:** ZX80, ZX81, TS 1000

64K RAM Pack

Namal Associates **Date:** 1982 **Price:** \$110.00 **Platforms:** TS 1000
No enclosure RAM pack. 4K pages can be switched off.

64K RAM Pack

Dolphin Computer **Date:** 1982 **Price:** \$149.95 **Platforms:** TS 1000

64K RAM Pack

Audio Vision **Date:** 1983 **Price:** \$99.00 **Platforms:** TS 1000

64K RAM Pack

DK'tronics **Date:** 1983 **Price:** \$84.75 **Platforms:** TS 1000
Available with or without a case. 8-16K area available.



64K RAM Pack

Gladstone Electronics **Model:** G64
Date: 1983 **Price:** \$149.95 **Platforms:** TS 1000
Metal case, snug fit for no wobble.

64K RAM Pack

Compu-Pak **Date:** 1983 **Price:** \$84.95
Platforms: ZX81, TS 1000
Expansion for the Compuboard system.

64K RAM Pack

BARLOG Software **Date:** 1983 **Price:** \$109.95 **Platforms:** TS 1000

64K RAM Pack

Suntronics **Model:** MX-64KP **Date:** 1983 **Price:** \$119.00 **Platforms:** TS 1000

64K RAM Pack

JRS Software **Date:** 1982 **Price:** \$119.95 **Platforms:** TS 1000

64K RAM Pack

Sunflower Systems **Date:** 1983 **Price:** \$119.95 **Platforms:** TS 1000
Self-contained memory expander, housed in metal.

64K RAM Pack

Computer Add-Ons **Model:** ME64
Date: 1983 **Price:** \$72.00 **Platforms:** TS 1000
RAM pack similar in shape to the TS 1016. Claims not to suffer from wobble.

64KT/64KZ

Independence Research **Date:** 1983
Price: \$115.00 **Platforms:** ZX81, TS 1000

64K RAM upgrades which mount inside the TS 1000 or ZX81. Installs in a minute with no soldering, and easy to follow instructions. Disable the 10-12K, 8-12K, or 8-16K areas of memory with a switch. Models specific to the ZX81 and TS 1000.

6K memory (internal)

Zodex **Price:** \$49.95 **Platforms:** TS 1000
Add 4K or 6K RAM internally.

8K RAM pack

DK'tronics **Price:** \$52.00 **Platforms:** TS 1000

Add on RAM for ZX80 instructions

Dennis Weber **Date:** 1982 **Price:** \$3.95 **Platforms:** ZX80
Complete schematic, parts list, sources, and how-to.

Complete Memory Plans

Spectra Computer Products **Date:** 1983 **Platforms:** TS 1000
Documentation packet that covers memory pack troubleshooting. Includes plans for constructing your own memory pack, EPROM reader and extending the memory of the 16K RAM pack up to 64K.

CRAMIC-81

Cambridge Microelectronics **Date:** 1983 **Price:** \$179.95 **Platforms:** TS 1000
16K RAM pack using CMOS 6116 static RAM chips for permanent data retention. Data can be stored almost indefinitely and loaded almost instantly with virtually zero chance of error.

A long life (10 years) lithium battery supplies power in standby mode. In the active mode, power is taken from the ZX81. Used on its own, it behaves like an ordinary

RAM pack except that it can be powered down and removed.

Cramic is bank-switched by a software I/O output instruction to ports 16 to 31.

The control of switching and copying of memory to the Cramic is done by a small machine code program in a REM statement at the beginning of each program and must be typed-in or run in from TAPE before using the pack.

An ordinary RAM pack can also be connected simultaneously. The two RAM units occupy the same memory area but either can be selected.

Decoder

John Oliger Co. **Date:** 1982 **Price:** \$5.95 **Platforms:** ZX80, ZX81
Fits inside the ZX80/ZX81 and remaps internal RAM to 8-9K or 9-10K. For use with external RAM pack.

Delta Device

Weymil Corporation **Date:** 1985 **Price:** \$75.00 **Platforms:** TS 1000
Non-volatile memory designed by Wilf Rigter. 32K RAM with Rigter Operating System (ROS). File-handling system in less than 600 bytes. Includes:

- DIRECTORY: displays all programs stored in memory by name and length in bytes. 44 entries per directory.
- SAVE: transfers BASIC programs, variables, and machine code to storage. Works in conjunction with the NAME/RE-NAME features.
- LOAD: transfers programs to normal RUN areas.
- MERGE: join two BASIC programs or variable files.
- EXIT: quit ROS to an auto-run program or the command line.

- ERASE: deletes programs from system memory and automatically moves other programs to fill the space left behind.

Built-in write protect switch to avoid accidental erasure of data. 32K is divided in four 8K blocks which are individually controlled via DIP switch for mapping to various memory map locations.
Manual includes instructions for adding more directories and "hot keys."

Downsway 16K RAM Pack

Downsway Electronic Ltd **Date:** 1982 **Price:** \$49.95 **Platforms:** TS 1000
Fully cased and compatible RAM pack.

Downsway 64K Memory

Downsway Electronic Ltd **Date:** 1982 **Price:** \$119.95 **Platforms:** TS 1000

Econo Tech 16K RAM Pack

EconoTech **Date:** 1982 **Price:** \$45.00 **Platforms:** TS 1000
Budget model 16K RAM supplied without case, gold-plated contacts. Designed to prevent wobble.

FD16K RAM

Fuller Micro Systems **Date:** 1982 **Price:** \$49.95 **Platforms:** TS 1000
Memory expansion that fits inside the Fuller keyboard and requires the Fuller motherboard.

FD64K RAM

Fuller Micro Systems **Price:** \$129.95 **Platforms:** TS 1000
Memory expansion that fits inside the Fuller keyboard and requires the Fuller motherboard.

Hardwire RAM Pack

Indiana Software Group Inc. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Kit and instructions to permanently connect RAM pack to computer.

Hardware

Hunter 8K Nonvolatile CMOS RAM/EPROM

Hunter Electronics **Price:** \$29.95 **Platforms:** TS 1000

Up to 8K RAM or EPROM; works with 16K RAM packs. Store your own system utilities or build a library of machine language routines. Can be used with any ROM or RAM.

Internal 16K RAM Expansion

Independence Research **Date:** 1982 **Price:** \$18.95 **Platforms:** ZX81

PC board and instructions. Instructions, \$7.95.

Jigsaw 16K RAM

Gladstone Electronics **Price:** \$49.95 **Platforms:** TS 1000

Can be used with Jigsaw 32K Plus to upgrade to 48K. LED power indicator.

Jigsaw 32K RAM

Gladstone Electronics **Price:** \$89.95 **Platforms:** TS 1000

32K RAM operates in tandem with a 16K to provide up to 48K RAM. Compatible with the Data-assette ZX99. LED power indicator.

Jigsaw 64K RAM

Gladstone Electronics **Price:** \$149.95 **Platforms:** TS 1000

64K RAM extends usable memory to 56K. LED power indicator.

LarKen RAMdisk

LARKEN Electronics **Date:** 1988 **Price:** \$130.00 **Platforms:** TS 2068

Expands the 2068 with up to 256K of nonvolatile RAM. Includes LKDOS Extended BASIC cartridge and memory board that attaches to expansion port.

LKDOS uses standard BASIC commands (LOAD, CAT, SAVE, etc) to operate the RAM disk.

Uses 32K (62256) CMOS RAM chips backed up with a battery; comes with 64K.

Compatible with Spectrum, OS-64 and disk drive systems.

M-16 Memory Module

Byte-Back Co **Model:** M-16 **Price:** \$69.95 **Platforms:** ZX80, TS 1000

Stackable with Sinclair RAM or other M-16 modules to 48K.

M-48 Memory Module

Byte-Back Co **Model:** M-48 **Price:** \$179.95 **Platforms:** ZX81, TS 1000

48K RAM module.

M-64 Memory Module

Byte-Back Co **Model:** M-64 **Price:** \$129.95 **Platforms:** TS 1000

Low power, no extra power supply required. Area from 8-16K can be switched out in 2K increments to accommodate memory-mapped peripherals, EPROMs, etc.

MEMIC-81

Cambridge Microelectronics **Date:** 1982 **Price:** \$69.95 **Platforms:** TS 1000

Contains one or two 2K (6116) CMOS RAM chips. Memory is addressed into the ROM area from 8K-16K in the ZX-81 memory map. The address at which each chip appears can be adjusted to any 2K section within that area.

Lithium battery in the unit provides a back-up power while the computer is switched off.

Memopak 16K

Memotech **Date:** 1982 **Price:** \$59.95 **Platforms:** TS 1000

16K RAM unit expansion capabilities through its piggy back connection and is fully compatible with Timex or Memotech 16Ks to give 32K RAM.

Memopak 32K

Memotech **Date:** 1982 **Price:** \$109.95 **Platforms:** TS 1000

The 32K Memopak could be combined with a 16K RAM for 48K RAM.

It was initially incompatible with the 2040 printer.

Memopak 64K

Memotech **Price:** \$179.95 **Platforms:** TS 1000

Memory board with I/O

Wisconsin Electronics **Model:** T1000 **Price:** \$134.00 **Platforms:** TS 1000

16K or 32K and two 8-bit LS TTL input ports and two 8-bit latching output ports.

Minimap

BASICare Microsystems, Inc. **Model:** B21 **Date:** 1983 **Price:** \$59.95 **Platforms:** TS 1000

Memory mapping device to expand address space from 64K bytes to 1 megabyte. Organized into vertical 64K pages. Up to 16 pages can be supported. All memory can be dynamically defined from within a program, allowing (for example) a program in one segment to manipulate the contents of various data segments.

A module in the BASICare Modular Expansion System.

MX-16 16K RAM

INSIGHT **Price:** \$89.95 **Platforms:** TS 1000

Expansion plus power supply.

MX-16 RAM

PM Enterprises **Price:** \$89.95 **Platforms:** TS 1000

Expansion RAM pack.

MX-48 RAM

PM Enterprises **Price:** \$169.00 **Platforms:** TS 1000

48K expansion memory; with power supply.

Hardware

QS 16K RAM

Quicksilva **Price:** \$52.50 **Platforms:** TS 1000

Cased dynamic RAM expansion.

RAM 08

BASICare Microsystems, Inc. **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000

Low cost memory expandable from 2K to 8K. Located in an address space not used by BASIC. Ideal for data or machine coded routine shared by second program.

A module in the BASICare Modular Expansion System.

RAM 16

BASICare Microsystems, Inc. **Model:** B23 **Date:** 1983 **Price:** \$49.95 **Platforms:** TS 1000

16K memory module. On-board address decoding permits simultaneous use of many RAM 16 modules in conjunction with Minimap.

A module in the BASICare Modular Expansion System.

RAM 64

BASICare Microsystems, Inc. **Model:** B24 **Date:** 1983 **Price:** \$149.95 **Platforms:** TS 1000

Arranged in 4 blocks of 16K; all can be used under MINIMAP control. On board address decoding allows simultaneous use of many modules with MINIMAP.

A module in the BASICare Modular Expansion System.

RAM Adaptor Board

Fuller Micro Systems **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000

Adapts Sinclair RAM pack to fit inside Fuller case.

Hardware

RAM for TS2000

Computer Add-Ons **Model:** ME80
Date: 1983 **Price:** \$79.00 **Platforms:** TS 2000, TS 2068
Announced before 2068 launched. Manufacturer assumed 2068 would be identical to Spectrum.



RAMPAK 16

Micro Systems Development **Date:** 1983 **Platforms:** TS 1000
Flat RAM module. 16K.

RAMPOR

Componedex Ltd. **Date:** 1982 **Platforms:** TS 1000
Integrated expansion system. Analog, digital I/O ports and 16K RAM expansion on one card.

SCRAM Board

Silicon Mountain Computers **Date:** 1988 **Price:** \$37.96 **Platforms:** TS 1000
Improved version of Hunter board. Comes with battery-backup to make memory non-volatile. Developed with LarKen Electronics to support Silicon Mountain's WRX-16-based high-resolution software.

Mapped in the 8K from 8-16K block. Can be re-mapped to 16-24K or 24-32K. Three SCRAM boards can provide 24K RAM for the ZX81 or 40K for the TS 1500.

BOARD ENABLE and WRITE PROTECT switches are provided. While write-protected, it is virtually impossible to corrupt

the data stored in the SCRAM. A four-position DIP switch allows for switching out any 2K block.

SCRAM-Wich

Silicon Mountain Computers **Date:** 1985 **Price:** \$49.95 **Platforms:** TS 1000
SCRAM board with two 8K static RAM chips, mapped to the normal 16-32K RAM region. Top 8K can be switched out in 2K blocks, allowing you to keep machine-code above RAMTOP.

SIN 16

Apropos Technology **Date:** 1982 **Price:** \$45.95 **Platforms:** TS 1000
Efficient design, uses less power. Gold-plated, heavy-duty connector prevents glitches.

Strip down

Commonwealth Agency, The **Date:** 1983 **Price:** \$5.94 **Platforms:** TS 1000
Prevent RAM wobble.

SUPER SIN64 64K RAM

Apropos Technology **Date:** 1982 **Price:** \$135.95 **Platforms:** TS 1000
8-16K range can switch in/out.

The Incremental 1.1

East London Robotics **Date:** 1982 **Price:** \$16.00 **Platforms:** TS 1000
Fits inside computer; plugs in, no soldering; up to 16K in increments of 2K. Uses 6116 static RAM.

The Lip 16K RAM

Sinclair Place **Date:** 1983 **Price:** \$48.00 **Platforms:** TS 1000
"The LIP" locks on to prevent the wobbles.

TS 1016 RAM pack

Timex Computer Corporation **Model:** M 331 **Price:** \$49.95 **Platforms:** TS 1000
Timex's version of the Sinclair ZX81 16K RAM pack for the Timex/Sinclair 1000. This, and the Sinclair unit, were famous for "wobble," a condition that resulted in reset-

ting the computer and loss of memory contents. Users overcame this problem with a variety of solutions, including Velcro between the computer and RAM pack, oversized rubber bands, poster adhesive and more.

Though the TS 1016 came in two variations (black and green connectors), there was no functional difference between them.

UM-16 16K RAM Pack

Byte-Back Co **Model:** UM-16 **Date:** 1983 **Price:** \$59.95 **Platforms:** TS 1000
"Ultimate memory" RAM pack. Battery backup, reset switch, PROM/ROM socket.

UM-64 64K RAM Pack

Byte-Back Co **Model:** UM-64 **Price:** \$129.95 **Platforms:** TS 1000
64K RAM pack with additional features.

- 8-16K area selectable in 2K increments.
- EPROM socket for 2K/4K.
- Battery backup (6 AA batteries) powers RAM pack and computer for up to 30 minutes.
- ROM-RAM transfer: copy Timex ROM into the 0-8K area of RAM, flip a switch and operate out of RAM.
- Switch that only resets 16-32K area.

ZX-Panda

Data-assette **Date:** 1983 **Price:** \$55.95 **Platforms:** TS 1000
Contoured case fits snugly against the rear of the computer. LED power indicator. Expandable to 32K with plug-in module that fits inside the existing case.

ZX-Panda Expansion Module

Data-assette **Date:** 1983 **Price:** \$44.95 **Platforms:** TS 1000
Plug-in module for 16K Panda, extending the memory to 32K.

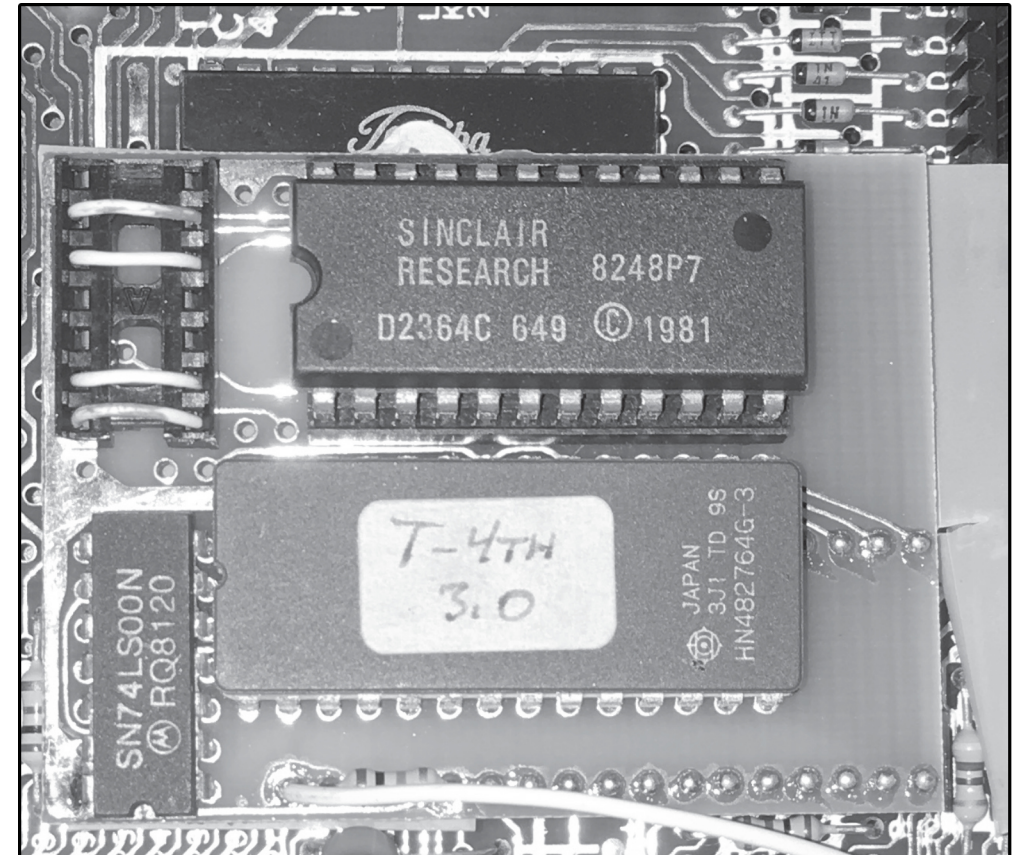
ZX81 2K upgrade

Micro Basics **Date:** 1982 **Price:** \$14.00 **Platforms:** ZX81
Kit including instructions and IC socket.

Hardware

ZX81 2K Upgrade Kit

J. Balogh **Date:** 1982 **Price:** \$15.00 **Platforms:** ZX81
Double on-board memory to 2K.



ROM Memory Expansion

The “operating system” of the ZX80, ZX81 and TS 1000 computers was contained in a special read-only memory (ROM) chip inside the computer. In all three, that chip was often in a socket, which made it easy to replace with another ROM.

Hardware that attached to the expansion port also supported ROMs, giving users a lot of opportunity to expand their systems.

For TS 2068 users, the cartridge slot allowed for ROM images to be delivered as cartridges.

16K EPROM

Memotech **Platforms:** TS 1000
Vaporware announced as coming soon in the Sync v3 n1 advertisement.

2764 * 2 EPROM Reader

John Oliger Co. **Price:** \$10.00 **Platforms:** TS 1000

Board is capable of mapping either of its 2764 EPROMs anywhere in the 64K map in 8K blocks. Board is intended to be used as a “cartridge” for storing Sinclair programs on EPROM. It can be used to store machine code tools in the 8-16K block.

2K “Toolkit” EPROM

Orme Electronics **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000

Works with EPROM-READ card. 2716 EPROM operating in 8192-10239 part of memory-map. Programmed with Breakout, Life, and Toolkit (renumber, including GOTO and GOSUB; READ, DATA, RESTORE; BLOCK-FILL, of screen; block delete, part of program; size, of program; free memory and others).

4K Toolkit

Delphic Enterprises **Date:** 1985 **Price:** \$25.00 **Platforms:** TS 1000

16 utilities that are relocatable to wherever you can execute machine code, on EPROM.

Tape version available from Tom Woods.

6502 Graphic Hardware Emulator

Sinclair Applications **Date:** 1982 **Price:** \$34.95 **Platforms:** TS 1000

All features of 6502 Software Emulator plus graphic display of 6502 hardware status.

6502 Software Emulator

Sinclair Applications **Date:** 1982 **Price:** \$24.95 **Platforms:** TS 1000

Learn 6502 machine language on your computer. Develop 6502 programs.

8K BASIC ROM

Sinclair Research Ltd. **Date:** 1981 **Price:** \$39.95 **Platforms:** ZX80

The new BASIC allows the use of floating point arithmetic to nine digit accuracy, and contains log and trig functions with inverses. This ROM facilitates improved graphics, and contains 37 new functions including DRAW, DATA, ARCSIN, VAL, and SCROLL. The plug-in conversion includes a new keyboard template and a supplementary manual.

8K BASIC ROM

MicroAce **Date:** 1981 **Price:** \$35.00 **Platforms:** MicroAce

Upgrade ZX-80 compatible 4K ROM to ZX-81 compatible 8K ROM. The MicroAce scrambled several data lines, so it requires an equally scrambled ROM.

8K EPROM Board

EPROM Services **Date:** 1983 **Price:** \$31.00 **Platforms:** TS 1000

Allows up to 8K of EPROM or RAM in 2K blocks to be added in the 8-16K ZX81 memory map. Supplied with EPROM I which contains 40 toolkit type routines, including scroll up/down/left/right, free memory, renumber program length.

ASCII Communications Firmware

CAI Instruments, Inc. **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000

EPROM (2716) used with the CAI/O board. Converts Sinclair code to ASCII code, allowing the TS 1000 to communicate with other computers and serial devices. Supports BAUD rates of 110 to 9600.

Assembler

Memotech **Date:** 1983 **Price:** \$49.95 **Platforms:** TS 1000

Code and edit a source program in the Z80 language and assemble it into machine code. Editor mode allows you to code directly in the right format, manipulate individual lines and control the exact placing of source and machine code. Routines may be merged or listed. Assembler mode han-

dles all standard Z80 mnemonics, numbers in hex or decimal, comments and user selected labels.

ASZMIC ROM

Comprocsys, Ltd **Date:** 1983 **Price:** \$49.00 **Platforms:** TS 1000

Plug-in replacement ROM for Sinclair BASIC. Redefines hardware and transforms it into an assembly language programming unit. ROM appears at 3000h-4000h. Offers:

- Full-screen editor: 16 shift keys give a word processor feel to control programming.
- Multi-file system: declare as many files as you want and they are handled by the operating system.
- Total assembler: Full Z80 mnemonics.
- Powerful debug: All the usual commands and more.
- Hi-res graphics: 255 x 144 resolution under program control.

Character Cartridge

Sinclair Applications **Date:** 1982 **Price:** \$24.95 **Platforms:** TS 1000

ROM holding 3 character sets. Upper/lower case, graphics and math/electronics. Supports custom, user-defined character set.

Corrected EPROM

Jack Dohany **Platforms:** TS 2068
EPROM to correct bugs in the 2068 ROM.

Custom Programmed 2K ROMs

Professional Electronics **Date:** 1982 **Price:** \$15.00 **Platforms:** TS 1000

Service to store BASIC or machine language programs in EPROMs. For use with Professional Electronics' printer interface board.

Debugged EXROM

Sinware **Author:** Ray Kinglsey **Date:** 1984 **Price:** \$16.00 **Platforms:** TS 2068

Ray Kingsley's fixes to the Timex EXROM, available as a 2764 EPROM.

Disassembler 4K ROM

Z-Tron International **Date:** 1983 **Price:** \$13.95 **Platforms:** TS 1000
2716/2732 EPROM compatible.

DROM

BASICare Microsystems, Inc. **Date:** 1983 **Price:** \$74.95 **Platforms:** TS 1000

DROM stands for Development Read Only Memory. This module can have up to 8K of RAM, via plug-on 2K RAM chips. The memory is backed by rechargeable battery for non-volatile storage of programs and data. Behaves as normal read/write RAM when the computer is in use.

Individual 2K blocks can be protected against overwriting. DROM can be located in either the TOOL or DATA segments of a page.

A module in the BASICare Modular Expansion System.

EPROM Board

Computer Continuum **Date:** 1983 **Price:** \$100.00 **Platforms:** TS 1000

Board containing 'SCOPE' and 'FFT' programs on four 2716 EPROMs in 8-16K memory space, on the Hunter board.

EPROM Cartridge Kit

Cinagro Software **Date:** 1983 **Price:** \$18.00 **Platforms:** TS 1000

Uncased board holds one 2716, 2732 or 2764, mapped 0-16K. Jumper selectable. Kit includes board, decoder chip, 28 pin socket, edge connector, tailpiece, small parts, and instructions.

EPROM Cartridge Kit

Upstate Labs **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000

Kit includes all parts necessary to build a plug in cartridge that will accept 2716, 2732, or 2764 EPROMs. Board may be memory mapped in 4K or 8K increments anywhere from 0-16K. Board accepts one EPROM and the memory mapping is jumper selectable.

EPROM Programmer

Synchronize **Date:** 1982 **Price:** \$74.45 **Platforms:** TS 1000

Store programs in EPROM. Module holds four 2716 EPROMs for 8K of ROM in 8K-16K region.

EPROM Programmer/Reader

MAV Microproducts **Date:** 1983 **Price:** \$64.96 **Platforms:** TS 1000

Supports two 4K 2732 EPROMs in the 8-16K slot. Housed in slim plastic case with ribbon connector and expansion port making it compatible with RAM packs, printers, etc. Uses zero insertion force sockets for programs that load in seconds instead of minutes.

EPROM-READ Card

Orme Electronics **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000

Accepts 2K 2716 and 2516 EPROMS. Operates in the 8192-10239 section of the memory map. Fits between the computer and RAM pack. With modification, it is compatible with certain other types of RAM.

Frequency Analysis 'FFT'

Computer Continuum **Date:** 1983 **Price:** \$75.00 **Platforms:** TS 1000

Fast Fourier Transform on EPROM in 4K of Z80 code. 256 points of magnitude and phase data calculated in one second. Can be used as a subroutine with the 'SCOPE' to display frequencies up to 75khz.

Improved ROM for TS 1000

Tom Bent **Price:** \$24.95 **Platforms:** ZX81, TS 1000, TS 1500

Debugged/improved LPRINT, CLS, SCROLL, DIM and more. Full display file, SCROLL/CLS work properly, LPRINT small numbers (.0001), DIM very large single strings (DIM A\$(47000)) in 64K and a few other changes incorporated. For the 16K TS 1000, TS 1500 or ZX81.

Memocalc

Memotech **Price:** \$49.95 **Platforms:** TS 1000

Spreadsheet analysis to assist with reports and financial forecasts. Performs complex number crunching routines with ease. Tables up to 7000 numbers, 250 rows or 99 columns with 64K. Calculate command reevaluates and displays the information.

Memotext

Memotech **Date:** 1983 **Price:** \$49.95 **Platforms:** TS 1000

Brings commercial standards of text editing to the Sinclair. Text is arranged in 32 character lines for the screen with comprehensive editing facilities. On output, the user chooses the line length required for printing and the system does the rest. When used with the Memopak Centronics interface, the word processor can print 80 character lines, upper and lower case and single and double size characters.

OS 64 Cartridge

Zebra Systems, Inc. **Model:** C271 **Date:** 1985 **Price:** \$29.95 **Platforms:** TS 2068

OS-64 is a ROM that supports the Timex/Sinclair's 64-column mode. It is fully compatible with 32 column commands and functions.

OS-64 is supplied on cartridge. Insert in the TS 2068's cartridge slot (with the power turned off), then turn your computer on. The boot screen will be black with white characters and the OS64 copyright message will

Hardware

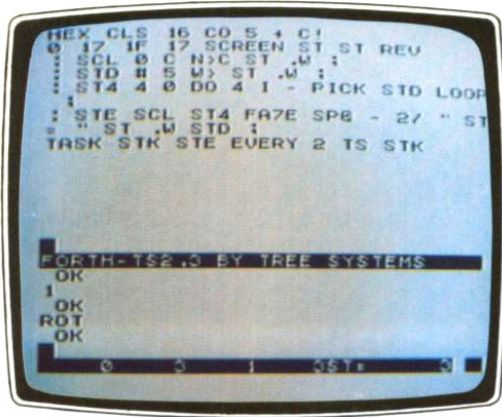
be displayed along with the Sinclair and Timex messages.

- PRINT, PRINT AT, PRINT TAB, LIST, LLIST, LPRINT and program editing commands work in 64 columns.
- You lose nearly 5K of free memory at the bottom of BASIC.
- Loading programs larger than 33K will crash the 2068.
- FLASH, BRIGHT and INVERSE do not work with OS-64.
- OS-64 uses Display File 2, so a normal SCREEN\$ will not work to SAVE or LOAD. You must SAVE/LOAD two separate CODE files in order to deal with a SCREEN in 64 column mode.
- If you have a TS 2040 printer, LPRINTs and LLISTs to the printer will be in 64 columns.

Once you set either PAPER or INK, the other is set to its compliment (i.e. PAPER 4 [green] will set the INK to 2 [red]). This change affects all the ink on the page, so that it's impossible to have more than one color of INK on any page. The BORDER is automatically set to the same color as PAPER. If you have a TS 2040 printer, LPRINTs and LLISTs to the printer will be in 64 columns.

Jeff Street, the Zebra programmer who wrote OS-64, included printer drivers for four Centronics interfaces. OS-64 supports LLIST, LPRINT and COPY (COPY will dump to EPSON compatible printers only). Most programs will work with OS-64's built-in 80 column printer drivers without modification.

You can also load your own custom driver; the documentation tells you where to load it and how to call it (can be either Centronics or serial).



Pluri-Forth

Tree Systems of Grand Rapids **Author:** Bob Alsum **Date:** 1983 **Platforms:** TS 1000

Pluri-Forth is both an operating system and a programming language, replacing the Sinclair ROM entirely. Additionally, FORTH programs were compiled and ran about 10 times faster than interpreter BASIC. Pluri-Forth offered multitasking, a feature not available in BASIC.

When used with the Sinclair ROM, the channel 2/3 switch is wired to the Pluri-Forth board to select between Forth and BASIC.

Pluri-Forth was supplied as a 2764 8K EPROM chip/carrier board with a socket for the Sinclair (or another 8K EPROM). The 104 page manual served as introduction for FORTH. Tree Systems manufactured and sold it, initially as Multi-Forth. Soft Magic Corp also sold it as Tree-Forth.

Versions

Robert Trelease reviewed version 2.3, based on his screen capture. A photo of the ROM installed in another system is marked v3.0.

Hardware

ROM-81

Cambridge Microelectronics **Date:** 1982 **Price:** \$34.95 **Platforms:** TS 1000

Store useful routines and commonly used information in EPROM. Accepts either 2716 or 2732 EPROMs to allow up to 8K of memory in 2K byte increments. Separate 2K and 4K decoding is link selectable. Mapped to the 8-16K area in the TS 1000 memory map.

Serial Printer Firmware

CAI Instruments, Inc. **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000

EPROM is contained in the ASCII firmware. When used with the CAI/O board, allows the user to communicate with other computers and with serial devices such as printers and teletypes. Supports BAUD rates of 110 to 9600.

Softbox Cartridges

Intercomputer, Inc. **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000

Solid state cartridges that plug directly onto the Softbox (up to 4 at a time) or onto the back of the computer (1 at a time). With control cartridges, you can perform different automatic functions. Cartridges eliminate waiting for cassette-based programs to load.

Spectrum B ROMs

Mechanical Affinity **Price:** \$10.00 **Platforms:** TS 2068

On EPROM, bug corrected with additional character set.

Spectrum ROM

Integrated Data Systems **Price:** \$22.50 **Platforms:** TS 2068

Super ROM Board

Audio Vision **Date:** 1983 **Price:** \$69.00 **Platforms:** TS 1000

Built-in printer interface, EPROM burner and autostart ROM.

Toolkit

BASICare Microsystems, Inc. **Model:** B26 **Date:** 1983 **Price:** \$44.95 **Platforms:** TS 1000

Uses up to four 2K EPROMs. Address space after on-board ROM. Allows calling TOOLKIT-held routines with USR function. Several TOOLKIT modules can be used under MINIMAP.

A module in the BASICare Modular Expansion System.

TS 1510 Command Cartridge Player

Timex Computer Corporation **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000, TS 1500

Cartridge adapter for the TS 1000 and TS 1500 computers. Includes reset switch. Loaded Timex Command Cartridges instantly on the TS 1500 and with a USR call on the TS 1000. Four cartridges were listed in the Timex 1983 Winter Catalog.



TS 1510 Command Cartridge player.

Hardware

ZX80 ROM switch

Marex Electronics **Date:** 1982 **Price:** \$24.95 **Platforms:** ZX80

Use your 4K or 8K software at the flick of a switch. Optional add-ons include keyboard beeper and cassette load processor.

Hardware



Sound and Speech Interfaces

The ZX80, ZX81 and TS 1000 computers lacked sound synthesizers, a moderately common feature in other home computers.

Sinclair owners could expand their computer with aftermarket sound synthesizers (most based on the General Instruments AY-3-8910), speech synthesizers and speech recognition systems.

Amplifier Unit for TS Computers

Tad Painter **Model:** AU01 **Date:** 1984
Platforms: TS 1000, TS 2068

Amplifier unit allows complete control over speech volume. Works with 9V battery included.

Audio Recognition System

Ron LeMon **Model:** ARS **Date:** 1984
Price: \$14.95 **Platforms:** TS 1000

Voiceprint identification, voice analysis or tone switch. 2K and 16K.

Bach Box

Rave Research **Date:** 1983 **Price:** \$49.95 **Platforms:** TS 1000

Hook up to any audio amplifier and start composing your own tunes. Pseudo-polyphonic output. Sample tune and full instructions included.

Big Ears Speech Recognition

William Stewart Systems **Date:** 1982
Price: \$99.00 **Platforms:** TS 1000

Speech recognition. Connects through I/O port. Microphone and cables included. Words are stored as voice patterns which the system learns from repetition. Voice prints occupy about 150 bytes each.

Blippo

Zebra Systems, Inc. **Model:** C122
Date: 1983 **Price:** \$19.95 **Platforms:** TS 1000

Sound effects generator.

Cognivox

Voicetek **Date:** 1981 **Price:** \$149.00
Platforms: TS 1000

Speech recognition unit/response unit. Library of 32 words or short phrases. Can be trained to recognize voice commands. Requires 16K. It was made for other home computers but there's no evidence it was produced for the Sinclair.

DCP Speech Pack

DCP Microdevelopments Ltd. **Date:** 1983 **Price:** \$90.00 **Platforms:** TS 1000

Compact cased speech unit. Built-in vocabulary; POKE commands make it speak. Additional word packs plug in inside. Contains all letters of the alphabet, numbers zero to over a million and some other general words.

Digitizing Hardware

Tad Painter **Model:** HS68 **Date:** 1984
Price: \$39.95 **Platforms:** TS 2068

Hardware for 2068 owners to create their own vocabularies. Plugs into ear socket. Spoken words are digitized and stored in memory automatically. Allows for an unlimited vocabulary. Can digitize other sounds as well as special effects.

Filtered Connector Plug

Tad Painter **Model:** FC01 **Date:** 1984
Platforms: TS 1000, TS 2068

Filtered connector plug conditions speech signal for use with external amplifiers such as AUO1. Plugs between MIC and amp. Internal speaker may be disabled by program if desired.

Mozart

Trigon **Date:** 1983 **Price:** \$79.91 **Platforms:** TS 1000

Compose yourself: music for the Timex-Sinclair computer. A complete hardware/software package. Three voices, noise channel. Built-in speaker. Plugs into ZX81 or TS 1000 without modification. Complete instruction manual included.

Music Synthesizer and I/O Port

William Stewart Systems **Date:** 1983
Price: \$68.00 **Platforms:** TS 1000

Three independently programmable voices and noise generator (AY-3-8910). I/O is arranged as two 8-bit bidirectional ports.

Hardware

Namal Super Talker

Namal Associates **Date:** 1982 **Price:** \$99.95 **Platforms:** TS 1000
Speech synthesizer. 560 common word dictionary, built-in RAM.

Polyphonic System

Rave Research **Date:** 1983 **Price:** \$49.95 **Platforms:** TS 1000
Includes Poly Port and Synthi Soft. 2K.

Programmable Sound Generator

Fuller Micro Systems **Date:** 1982 **Price:** \$39.95 **Platforms:** TS 1000

QS Sound Board

Quicksilva **Date:** 1981 **Price:** \$40.00 **Platforms:** ZX80, ZX81, TS 1000
AY-3-8910 sound generator based sound synthesizer. Three voices, 5 octave range.

Sinclair Place imported a version manufactured by Indescomp.

SONUS

BASICare Microsystems, Inc. **Date:** 1983 **Platforms:** TS 1000
Three-voice, AY-3-8910 sound-chip based module with stereo option. A module in the BASICare Modular Expansion System.

Sound Booster

John Mathewson **Model:** JWM-2 **Price:** \$41.50 **Platforms:** TS 2068
Plugs into rear port, amplifies BEEP and SOUND output. Has pass-through buss.

Sound Unit

Thurnall Electronics **Date:** 1983 **Platforms:** TS 1000
Programmable sound unit with built in loudspeaker, allow programmable generation of a whole range of rounds from music to special effects.

Speech Synthesis Unlimited

William Stewart Systems **Date:** 1982 **Price:** \$99.95 **Platforms:** TS 1000
Uses phonemes to build up words. Average of 6 bytes will store the phoneme codes for a spoken word. Self-contained, including amplifier, speaker and bidirectional computer interface so other add-ons may be used. Jack to external speaker.

Speech Synthesizer

Computer Add-Ons **Model:** SS1 **Date:** 1983 **Price:** \$65.00 **Platforms:** TS 2000
Speech synth for ZX Spectrum. Announced before TS 2068 was launched.

Speech Synthesizer and Amplifier

DK'tronics **Date:** 1985 **Price:** \$34.95 **Platforms:** TS 2068
Includes text to speech converter. Requires twister board.

SRS1000 Speech Recognition System

Advanced Interface Designs **Date:** 1984 **Price:** \$34.95 **Platforms:** TS 2068
Train your computer to obey your voice commands. Used a microphone and amplifier connected to the microphone jack to record and recognize words. Included speech amplifier unit, program and documentation.

An article by Brad Bennett in Sync v3 n6 described how to build the speech amplifier unit and included a program for recording "voice prints" on a 16K TS 1000.

SRS2000 Speech Recognition System

Advanced Interface Designs **Date:** 1984 **Price:** \$34.95 **Platforms:** TS 2068
Train your computer to obey your voice commands. Recognizes up to eight spoken words. Used a microphone and amplifier connected to the microphone jack to record

and recognize words. Included speech amplifier unit, program and documentation.

Teach Your ZX80/81 to Talk

Harthun Engineering and Research **Date:** 1982 **Price:** \$5.00 **Platforms:** TS 1000
Detailed plans for hardware, parts sources, and software to make your computer produce natural speech.

Telesound 84

Compusound **Date:** 1983 **Price:** \$19.00 **Platforms:** TS 1000
Enables any sound source such as the loudspeaker or sound effects from a home computer to be heard direct through an unmodified TV set. Three snap on connections inside the computer.

The Arcade Master

Hurricane Electronics Lab **Date:** 1982 **Price:** \$64.95 **Platforms:** TS 1000
Sound module with three tone generators, 8 octave range, 3 channel mixer, noise source; uses AY-3-8910. Two TTL I/O ports with mating connectors for Atari joysticks. Memory-mapped.

The Parrot

Research in Speech Technology (R.I.S.T.) Inc. **Date:** 1983 **Price:** \$89.95 **Platforms:** ZX80, TS 1000
The Parrot used the General Instruments SP0256 speech synthesizer chip, which used 64 allophones to generate speech. Supplied with software on cassette enabling you to select, string together, and pronounce the sounds.

Three Channel Sound System

DK'tronics **Date:** 1985 **Price:** \$39.95 **Platforms:** TS 2068
AY-3-8910-based sound synthesizer. Requires twister board.

Hardware

TS2068 Speech Synthesizer

John Mathewson **Model:** JWM-5 **Date:** 1985 **Price:** \$39.95 **Platforms:** TS 2068
Fully-decoded speech synthesizer that can be used to add speech to your existing programs or to include speech in your new programs. Uses the General Instruments SPO256A speech synthesizer chip; allows you to say virtually anything in English. Includes its own audio amplifier, filter and volume control. 9v battery provides power. Audio output drives 8 ohm speaker.

Zebra-Talker 1000

Zebra Systems, Inc. **Model:** C141 **Date:** 1983 **Price:** \$79.95 **Platforms:** ZX81, TS 1000, TS 1500
Unlimited vocabulary voice synthesizer uses the Votrax SC-01 phoneme synthesizer with 4 programmable pitch levels and automatic inflection. It produces all the phonemes required for English speech.

The Zebra-Talker comes complete with the ZTalker Text to Speech software on cassette. This software contains an advanced machine language algorithm with more than 400 rules of English pronunciation. All you have to do is type in text in English and ZTalker will produce the necessary sequence of phonemes. The Zebra-Talker also features an expansion connector for "piggy-back" expansion. The audio output plugs into any audio system.

The Zebra-Talker comes complete with:

- ZTalker Text to Speech software
- Zebra Phoneme Editor software
- Phoneme dictionary
- Instruction manual

Zebra-Talker 2068

Zebra Systems, Inc. **Model:** C242 **Date:** 1985 **Price:** \$69.95 **Platforms:** TS 2068
TS 2068-specific version of the Zebra-Talker.

Hardware

ZON X-81

BI-PAK Semiconductors **Date:** 1982
Price: \$49.95 **Platforms:** TS 1000
Self-contained sound unit; uses AY-3-8910 3 channel sound chip. Full instructions and programs supplied.

ZX Micro Amplifier

Ron LeMon **Date:** 1983 **Price:** \$4.95
Platforms: TS 1000
Etched and drilled circuit board.

ZXTALKER

User Friendly Research **Date:** 1983
Price: \$99.95 **Platforms:** TS 1000
Unlimited vocabulary, adjustable pitch, amp and speaker included. Bare board and assembled versions.

Hardware

Spectrum Emulators

Despite the success of the Sinclair and Timex computers in the American market, the output of software came nowhere near to matching what was available in England.

English ZX Spectrum users had several magazines, dozens of software houses and a cornucopia of high-quality commercial software.

Unfortunately, the many changes Timex made in creating the 2068 from the ZX Spectrum prevented American users from running Spectrum software directly.

Timex acknowledged this problem up front, when Dan Ross demonstrated the TS 2068 at the Boston Computer Society’s Timex/Sinclair user group meeting. As part of the demonstration, Ross showed the “Chameleon,” a cartridge that allowed users to run Spectrum software on the TS 2068.

While never released by Timex, enterprising users did find ways to implement their own versions, as cartridges and internally.

2068 Emulator Board

Integrated Data Systems **Date:** 1985
Price: \$10.00 **Platforms:** TS 2068
Spectrum emulation when used with appropriate ROM.

EMU-1 Spectrum Emulator

Enter Lingua **Date:** 1985 **Price:** \$60.00
Platforms: TS 2068
Spectrum ROM that fits in the cartridge slot.

EMU-2 Spectrum Emulator

Enter Lingua **Date:** 1985 **Price:** \$60.00
Platforms: TS 2068
Spectrum ROM that fits in the cartridge slot. Contains extra socket for another EPROM.

EPROM Cartridge Board

Timex Computer Corporation **Model:** SK2000-81 **Date:** 1983 **Platforms:** TS 2068
This device would have been used by Timex and third-parties in developing cartridge software. It's likely that fewer than 100 were made. A plastic "sled" under the PCB aids insertion.

Demonstrated by Dan Ross at the introduction of the TS 1500 and TS 2068, the "Chameleon" cartridge, with a Spectrum ROM, allowed the 2068 to run Spectrum software. Instructions, a schematic and artwork for making your own were published in the technical manual.

The board supports up to four 16K EPROMS (27128), mapped across the 64K memory space of the 2068. Address lines A14 and A15 are combined with /ROSCS (Rom Oriented Software Chip Select) and /RDB (read) to select each EPROM's /CE (chip enable) line.

OmniEmu

Curry Computer **Price:** \$40.95 **Platforms:** TS 2068

Rainbow plus Interface

DAMCO Enterprises **Date:** 1985 **Price:** \$49.95 **Platforms:** TS 2068
Combines improved Spectrum ROM emulation plus a Spectrum compatible expansion connector all in one.

ROMFIX

G. Russell Electronics **Platforms:** TS 2068
ROMFIX upgrades the Russell Electronics ROMSWITCH to run all Spectrum programs. Installs under the EXROM.



ROMSWITCH

G. Russell Electronics **Date:** 1984
Price: \$45.00 **Platforms:** TS 2068
Plugs inside the TS 2068. Simple magnet switch selects TS 2068 vs Spectrum mode.

Spectrum Emulator

Jack Dohany **Date:** 1990 **Price:** \$15.00
Platforms: TS 2068
This emulator consisted of a 32K EPROM that replaced the 16K ROM. The EPROM contained the 2068 operating system in the lower half, and Spectrum operating system in the upper half. Errors in both operating systems were corrected. Error correction is detailed in documentation.

The lower or upper half of the 32K EPROM is selected by means of a small switch on the back of the 2068.

The emulator was compatible with all disk systems except AERCO, which re-

Hardware

quires software emulation instead. ZEBRA disk systems required an additional dual EPROM installed in the ZEBRA disk interface.

Spectrum Emulator Cartridge

Zebra Systems, Inc. **Model:** C234
Date: 1985 **Price:** \$19.95 **Platforms:** TS 2068

Plug-in cartridge with pull-up resistors.
Housed in modified Timex cartridge case.

Switchboard

J. Keene Ltd **Date:** 1985 **Price:** \$35.00
Platforms: TS 2068

Internally mounted Spectrum/TS 2068
ROM option, similar to ROMSwitch.

Hardware



Tape Storage Systems and Solutions

Loading and saving to tape could be very challenging for Sinclair owners. The TS 1000 required an audio signal of sufficient volume and tonal quality to load software. Most portable cassette recorders that owners used were up to the task but, often as not, owners encountered head alignment issues that added to their frustration.

A number of vendors offered devices to help find the right volume level; G. Russell Electronics' Winky Board was a very popular solution.

Other vendors took tape storage to an extreme, offering devices that could control multiple tape decks with program and data saving to two different units.

Abacus Controller for TS 1000

Abacus Electronics **Date:** 1982 **Price:** \$24.95 **Platforms:** TS 1000
Eliminate swapping of plugs when loading and saving programs on cassette. Single switch selection of TALK, SAVE, CUE, and LOAD modes.

Abacus Controller for TS2000

Abacus Electronics **Date:** 1983 **Price:** \$35.95 **Platforms:** TS 2000, TS 2068
Eliminate swapping of plugs when loading and saving programs on cassette. Single switch selection of SAVE, LOAD, and AMP modes. Built in amplifier and loudspeaker boosts sound output.

Cassette Interface

Phoenix Engineering Systems **Date:** 1982 **Price:** \$29.95 **Platforms:** TS 1000
Optional LED indicator.

Cassette loading monitor

Edson Electronics **Date:** 1982 **Price:** \$28.95 **Platforms:** TS 1000
Digital VU meter. Hooks up in seconds outside the computer; helps ensure proper loading level.

Cassette output level setting

Arnold J. Gold **Price:** \$2.00 **Platforms:** ZX80, TS 1000
Schematic for precision setting of cassette output level.

Complete LOAD and SAVE Plans

Spectra Computer Products **Date:** 1983 **Price:** \$7.00 **Platforms:** TS 1000
Documentation packet that covers troubleshooting tips and plans for LOAD monitor and signal filtering.

Data Conditioner II

Communications System Laboratories **Date:** 1982 **Price:** \$49.95 **Platforms:** TS 1000
Tape loading aid. Accurate volume control setting, easy tape cueing, use remote feature.

In-Line Load Monitor

M. C. Hoffman **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Tape loading aid. Helps to LOAD prerecorded software from cassette.

L-Monitor

L-Monitor **Date:** 1983 **Price:** \$23.50 **Platforms:** TS 1000
Multipurpose tape loading aid assures loading. Features extremely sensitive, reliable micro-ammeter. Output for earphone, amplifier, or duplicating.

Loading Aid

Fulcrum Products **Price:** \$21.00 **Platforms:** TS 1000
Removes guesswork from adjusting cassette recorder volume. Optimum level attained when red and green LEDs flash in unison. Plugs between computer and recorder.

Loading monitor

R. H. Enterprises **Date:** 1982 **Price:** \$6.00 **Platforms:** TS 1000
LED cassette loading monitor.

Loadstar

Cinevision System **Date:** 1983 **Price:** \$45.00 **Platforms:** TS 1000
Calibrated distortion free tape loading amplifier for all tape machines. Triple LED displays for low, normal, overload. Connects between tape player and computer.

QSave

Personal Software Services **Model:** PL7001 **Date:** 1982 **Price:** \$37.95 **Platforms:** TS 1000
LOAD/SAVE a full 16K in 29 seconds (16 times faster). QSAVE amplifier/filter unit plugs between recorder and computer. A data transfer rate of 4000 plus baud vs 250 on the standard TS 1000.

RZ1 tape controller

Stephen Adams **Date:** 1983 **Price:** \$40.00 **Platforms:** TS 1000
Allows control of the SAVE and LOAD leads as well as the tape motor for one or

Hardware

two tape recorders. Relay isolation from the computer allows control of 110 volts AC 1 amp from the unit. Also has a built in 5 bit port (6 if only one motor relay fitted). Outputs can be used for banks switching (diagram provided).

Speedload

Intercomputer, Inc. **Model:** PL7500
Date: 1984 **Price:** \$59.95 **Platforms:** TS 1000, TS 1500

Cartridge and flexible extension cable. Program in ROM speeds up load, promised to load a 5 minute program in 20 seconds.

Tape Loading System

Compusa Corporation **Model:** LOS-201
Date: 1983 **Price:** \$36.50 **Platforms:** TS 1000

Eliminate the frustration of tape loading. LED indicators show high volume or low/noisy tape. Earphone plug lets you monitor tape while loading. Reset switch. Save/Load switch allows both to be connected.

Tape Recorder Interface

D. Bruce Electronics **Price:** \$12.00
Platforms: ZX80, ZX81
Improves load signal level.

Test and Alignment Cassette

Hilderbay Ltd. **Date:** 1982 **Price:** \$9.80
Platforms: TS 1000

Helps align mono cassette recorder head for best results, check tape speed and path.

The Box

Sconzo & Sons **Date:** 1984 **Price:** \$26.95 **Platforms:** TS 1000
Tape load aid; includes VU meter and remote pause switch.

The Hilderbay Loading Aid

Hilderbay Ltd. **Date:** 1982 **Price:** \$11.90 **Platforms:** TS 1000
Simple device to determine proper volume setting for loading.

The Last Cassette/16K Fix
Cottage Technology **Date:** 1983 **Price:** \$1.95 **Platforms:** TS 1000

Small modification reduces RAM pack noise at the signal source. Kit and instructions. 16K.



TS 2020 Cassette Recorder
Timex Computer Corporation **Model:** TS 2020 **Date:** 1983

The TS 2020 cassette recorder was one of several peripherals matched the 2068 in design. Manufactured by Sampo and sold by Radio Shack as the Miniset-9.

Visi-Load Tape Load Monitor
H & H Electronics **Date:** 1983 **Price:** \$13.95 **Platforms:** TS 1000

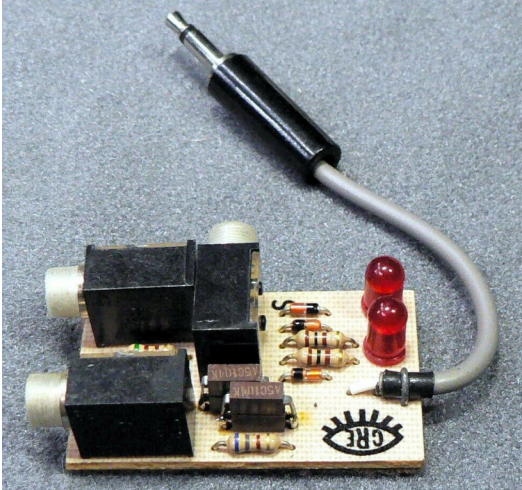
Three step LED meter that monitors tape loading level with just a glance. Plugs inline between the computer and the tape player.

Vu-Load

L & G Enterprises **Date:** 1983 **Price:** \$20.95 **Platforms:** TS 1000
Monitors tape output level; gives a positive SAVE induction; detects blank tape without disconnecting cassette wires.

WIDGITAPE

CAI Instruments, Inc. **Price:** \$99.95 **Platforms:** ZX80, TS 1000
Standard cassette recorder modified for computer control. Offers file directory, read/write from programs. Uses endless loop tapes.



Winky Board

G. Russell Electronics **Date:** 1982 **Price:** \$18.00 **Platforms:** TS 1000
Passive filter that plugged into the cassette tape recorder to produce easier tape loading. Supported other functions such as a tape duplication and listening via earphone.

Winky Board 2

G. Russell Electronics **Date:** 1983 **Price:** \$20.95 **Platforms:** TS 1000
Tape interface that filters noise when saving for clean, easy loading tapes. Duplicate any cassette —even normally unsavable cassettes. Save on two cassettes simultaneously. Monitor signal via earphone to set optimum tape volume.

Winky Board 2000

G. Russell Electronics **Price:** \$26.95 **Platforms:** TS 1000, TS 2068
The Winky Board 2000 brought the same features of the Winky Board to TS 2068 users. It provided visual feedback of signal level, a jack for monitoring the signal itself and was a tool for duplicating cassettes as backups.

Z-DUBBER

Bytesize Micro Technology **Date:** 1982 **Price:** \$29.95 **Platforms:** ZX80, ZX81, TS 1000, TS 2068
The Z-DUBBER is an interface between the Sinclair computer and its cassette recorder which allowed even the most difficult

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cassette program to load more easily. Additionally, the Z-DUBBER allowed you to connect two cassette recorders to create perfect backup copies of your programs. The Z-DUBBER operated on two AAA cells.

ZX-21 Metered Cassette Interface

Data-assette **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000
Cassette loading interface with VU meter. Reduce program load errors to a minimum by pre-setting your tape recorder to the level that is compatible with the computer.

ZX-22 Powered Cassette Interface

Data-assette **Date:** 1982 **Price:** \$39.95 **Platforms:** TS 1000
Power driven cassette loading interface. This unit uses the power pack to test audio level and gives a red or green signal to indicate the proper setting for the computer.

ZX-99 Tape Control

Data-assette **Date:** 1982 **Price:** \$150.00 **Platforms:** TS 1000
Automatic tape control (up to 4 units) and RS-232C printer interface. Built-in USR commands provide program control over the cassette recorders and features such as "Tape to Tape Copy" or program list.



Video Interfaces

The pre-TS 2068 computers connected directly to the user's television. It was a good solution and it worked for many. Some users, however, preferred to use a dedicated monitor and that required a direct video interface.

Another popular upgrade added color graphics and sprites to the TS 1000. These were often based on the Texas Instruments TMS9918A video display processor, the same chip used in the TI 99/4A computer. With one of these adapters, a TS 1000 could have more powerful graphics than an Apple II or comparable graphics to a Commodore 64.

Color Graphics and Sound

Sigma Technology **Date:** 1983 **Price:** \$179.95 **Platforms:** TS 1000

Kit, with 16K RAM. Plugs into ST-50 buffered motherboard.

Color SIN 81

Compusa Corporation **Date:** 1984 **Platforms:** TS 1000

Video upgrade based on the Texas Instruments TMS9918A video display processor (VDP) designed by Daniel Roy. An article about the design, So You Wished You Had Bought a TS 2000, by Roy was published in Sync v3 n4. Compusa announced it as “coming soon” in their ad in Sync v3 n6, two issues before the magazine ceased publication.

Complete Video Plans

Spectra Computer Products **Date:** 1983 **Price:** \$7.00 **Platforms:** TS 1000

Documentation packet that covers video trouble shooting tips, UHF conversion, fine tuner for the RF modulator, direct and reverse video.

Direct Reverse Video Module

Computech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Direct Video

Micro-Mod Specialties **Price:** \$10.00 **Platforms:** TS 1000

Complete plans and parts kit to convert ZX-81, TS 1000 and television.

Direct Video Kit

Random Access **Model:** DVC-2 **Date:** 1983 **Price:** \$18.95 **Platforms:** TS 1000

Provides direct composite out with option to invert video. Not compatible with units with UHF modulator. Steve Pence wrote an article describing this upgrade that was published in the May 1983 issue of Computers & Electronics.

Direct Video Modification

AERCO **Model:** DV-1 **Date:** 1982 **Price:** \$15.00 **Platforms:** TS 1000

Allows connection of standard (composite video) computer monitor to Sinclair computers for noise-free display. Two transistor circuit.

Direct video/inverter

Jim Houston Enterprises **Platforms:** TS 1000

Provides direct monitor connection and inverted signal for white-on-black.

Inverse Video Module

Haven Hardware **Price:** \$12.00 **Platforms:** TS 1000

Permits normal black on white or inverse video on black. Solders inside case.

Inverse Video Module

Sinclair Place **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000

Installs inside case. Normal or inverse composite video signal.

Kolorworks

Brainchild Computer Works, Inc. **Date:** 1983 **Price:** \$149.95 **Platforms:** TS 1000

Texas Instruments TMS9918 video display processor (VDP) adaptor for the TS 1000. All of the features of the TMS9918, including:

- 32 sprites
- 256 x 192 pixel graphics
- User defined characters
- Extension of BASIC commands include PAPER, INK, BORDER, BIN, SPRITE, OUT, INP
- 16K RAM dedicated to the VDP

James Hastings-Trew, a Kolorworks owner, wrote a graphics toolkit for the product.

Hardware

Reverse Video Module

Cottage Technology **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000

Convert to white letters on dark background.

RGB Interface Unit

John Mathewson **Model:** JWM-4 **Price:** \$34.95 **Platforms:** TS 2068

Connect TS 2068 to an RGB monitor. Plugs into rear expansion connector. Includes through-buss connector.

The Video Reverser

Sight & Sound Electronics **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000

Inverts video signal to display white on black. Installs inside computer; option switch to select normal or inverse.

TMS 9918A Video Upgrade

John Oliger Co. **Date:** 1986 **Price:** \$48.95 **Platforms:** TS 1000

Two board, extensive upgrade that integrates the TMS 9918A video display processor into the ZX81/TS 1000. Provides:

- color
- multiple graphics resolutions, up to 256x192 pixels
- up to 32 sprites
- a SLOW mode almost as fast as FAST mode
- blink free FAST mode
- lower case characters instead of inverse upper case

Interfaces the TMS 9918A color graphics video chip, same as used in the TI 99/4A, Colecovision and MSX computers. Includes ROM that supplements the TS 1000 ROM, replacing display routines.

UHF Modulator

Computer Continuum **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000

Replaces the VHF (ch 2-3) modulator on the ZX81 circuit board. UHF is less sensitive to the interference radiated from the computer or its peripherals.

Video Amplifier Unit

D. Bruce Electronics **Price:** \$12.00 **Platforms:** ZX80, ZX81

Produces composite video signal for monitor.

Video Inverter Kit

Burnett Electronics **Price:** \$5.00 **Platforms:** ZX80

Video Monitor Output

Cottage Technology **Date:** 1983 **Price:** \$2.95 **Platforms:** TS 1000

Converts TS 1000 to standard monitor signal.

ZX81 Video Inverter

D. Fritsch **Date:** 1982 **Price:** \$13.00 **Platforms:** TS 1000

Circuit to invert video signal (white on black); fits inside computer. Switch to select normal or inverted video.

Hardware

Software

American Sinclair owners had an amazing quantity and variety of software available, especially considering the many challenges the computers presented to their owners.

In this section, TS 1000 is listed as the platform for programs that run on the ZX81 or TS 1000. ZX 81 is listed when a program runs in 1K RAM.

```

*** ZX81 ARTIST ***
J.K.GREYE SOFTWARE
DRAW MODE:
1-8 DRAW IN DIRECTION INDICATED
ON KEY;
0 SWITCHES TO RUBOUT (OR MOVE) ,
MODE (NO SHIFT);
0 RESTORES DRAW MODE;
0 CLEARS THE SCREEN;
0 COPS TO THE PRINTER;
0 SAVES TO CASSETTE;
0 SELECTS MEMORY FUNCTION.

MEMORY MODE:
YOU HAVE 10 MEMORYS TO STORE
YOUR DRAWINGS,WHICH MAY THEN BE
SAVED TO CASSETTE;
WRITE ,STORES YOUR DRAWING;
NOTE..USES ZX81 FAST MODE;
READ ,RECALLS PREVIOUS DRAWINGS.

DRAW OR MEMORY ?

```

Art

Of all things, one would not imagine using a TS 1000 to produce drawings. And yet, a surprising number of “etch-a-sketch” programs were available for this computer, all operating in the confines of 64x44 pixels.

The TS 2068 was a far more capable computer and, as one might expect, there were a great number of artistic programs for it.

16K High Resolution

Macronics **Price:** \$20.00 **Platforms:** ZX80

Create your own artwork, 192x192 pixels.

Art for All Ages

Games to Learn By, Inc. **Author:** Bob Conlon **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068

Drawing program. Draw circles, squares and freehand with joystick in eight colors. Undo, cut and paste features.

Art for Kids

Games to Learn By, Inc. **Author:** Bob Conlon **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068

Simplified version of Art for All Ages for young children.

Art Pac

Simplex Software **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000

Comp-U-Sketch: computerized version of popular ETCH-A-SKETCH toy. Micro Organ: 4 octave organ music through your TV. Kaleidoscreen: TV screen becomes a computerized kaleidoscope.

Artist

Run-It Software Club **Date:** 1982 **Price:** \$11.95 **Platforms:** TS 1000

Drawing graphics for floor plans, lettering, etc. 2K.

Artist's Friend

Pegasus Micro Systems **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 2000, TS 2068

Artworx

NovelSoft **Author:** Ariel S. Frailich, David C. Ridge **Date:** 1987 **Price:** \$19.95 **Platforms:** TS 2068

Drawing and gallery program for the 2068. Includes variety of brushes, fonts and drawing tools.

Block Painter

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000

Paint on the screen in horizontal or vertical lines one character wide. Listing, 1K.

Block Pattern Generator

EZRA GROUP II **Date:** 1983 **Price:** \$2.80 **Platforms:** TS 1000

Generates 65,535 designs based on 16-pt array. Listing, 16K.

CartoonMaker

Game Room, The **Date:** 1983 **Price:** \$6.00 **Platforms:** ZX81, TS 1000

SuperGraphiCreator, magic calendar, IDEA KIT, multi-memory calculator, geometric patterns and animator's kit. 1K.

CartoonMaker 16

Game Room, The **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000

Expanded versions of SuperGraphiCreator, magic calendar, IDEA KIT, multi-memory calculator, geometric patterns and animator's kit. 16K.

Cartoons

W S M Entertainment **Date:** 1982 **Platforms:** ZX81, TS 1000

Create live action cartoons or just characters.

Circus Coloring Book

Zebra Systems, Inc. **Model:** C261 **Date:** 1985 **Price:** \$7.95 **Platforms:** TS 2068

Contains pictures of a circus flag, circus tent, clown, elephant, ringmaster, lion, strong man, and more. For use with Zebra graphics tablet.

Coloring Book Utility & Linker

Zebra Systems, Inc. **Model:** C260 **Date:** 1985 **Price:** \$14.95 **Platforms:** TS 2068

Lets you create Zebra graphics tablet coloring books. Includes special picture data-compression routines to squeeze as many pictures as possible into the computer's available memory.

Software

Compu-Sketch

Skelly Computing **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000

Easily draw pictures of any sort on your screen.

Diagram Maker

Integrated Data Systems **Date:** 1983 **Price:** \$11.80 **Platforms:** TS 1000

Prints any character, paints screen from keyboard. 16K.

Draw 512

McBrine Computer Products **Date:** 1988 **Price:** \$9.95 **Platforms:** TS 2068

Drawing package. Works in 256x192 or 512x192. Draw, line, box, square, circle, invert, block invert, block erase, merge screens and more.

DRAW II

Peech II Productions **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068

Extended Paint

Dave Franson **Date:** 1987 **Price:** \$19.95 **Platforms:** TS 2068

Paint program with eight times the normal resolution. More than 25 unique functions. Joystick control, menu-driven. Printer support including high resolution grayscale printing to TS 2040 and Epson printers. Print in color to Canon color ink-jet printers and compatibles.

Grafist

Canaan Software **Author:** T. A. David **Date:** 1985 **Platforms:** TS 2068

Graphic design program.

Graphics

Bridge Software **Date:** 1982 **Price:** \$9.00 **Platforms:** ZX81, TS 1000

Kaleidoscope, Large Print, Medium Print, Draw a Picture. 1K.

Hexal Pattern Generator

EZRA GROUP II **Date:** 1983 **Price:** \$3.80 **Platforms:** TS 1000

Generate 65,535 patterns based on 36-pt. array. Listing, 16K.

Instant Art

Memory Master **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000

Paint pictures on the screen using two brush sizes and three colors (black, white and gray). Paint in 8 directions and change brush size or color at any time with a press of a key. Option for painting random symmetrical patterns. 16K.

Mega-Draw

Cactus Software **Date:** 1985 **Platforms:** ZX Spectrum

Commands include fill, arc, box and ability to print with 4 different fonts.

Microartist

Systems and Solutions, Ltd. **Price:** \$10.00 **Platforms:** ZX81

Allows you to draw pictures using normal and reverse video graphics. 1K.

Oblique Painter

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000

Sketches diagonal lines. Listing, 1K.

OS DRAW

Zunk Custom Electronics **Date:** 1988 **Price:** \$10.00 **Platforms:** TS 2068

Drawing program that requires OS-64 and works with A & J Microdrive.

Picture Plot

BARLOG Software **Date:** 1982 **Price:** \$2.00 **Platforms:** ZX80, ZX81, TS 1000

Machine language graphic routine. 1K.

PIX-FX

Ed Grey Enterprises **Date:** 1989 **Price:** \$25.00 **Platforms:** TS 2068

Add special effects to a saved screen file, including wrapping around a globe, change perspective, magnify, reduce and merge. Graphical user interface. Supplied on tape or disk.

Pixie

S & S Company, The **Model:** T2203 **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 2068

Pixie: character editor; Pixure: artist program.

PJ's Chromatech

Zebra Systems, Inc. **Model:** C417 **Date:** 1986 **Price:** \$14.95 **Platforms:** TS 2068

Utility to color TS 2068 screen images and save to tape. Excellent companion to black-and-white drawing programs like VU-3D and Tech Draw Jr.

Plot Painter

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000

Paint in all directions on the screen. Listing, 1K.

Quilter

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000

Paint in one corner and the computer will duplicate in blocks like a quilt. Listing, 1K and 16K.

Screen Painter

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000

Sketches horizontal and vertical lines. Listing, 1K.

SincArtist

Callisto Software **Author:** James Hastings-Trew **Date:** 1985 **Price:** \$11.95 **Platforms:** TS 1000

Drawing program with many features, brushes and patterns. Uses a 48x64 pixel "window" to the 256x192 image.

SincArtist HR

Callisto Software **Author:** James Hastings-Trew **Date:** 1985 **Price:** \$11.95 **Platforms:** TS 1000

Copy artwork to TS 2040 printer. Requires TS 1000 with socketed 2K RAM and hardware modification.

Software

Skeet

Biocal Software **Date:** 1983 **Price:** \$2.00 **Platforms:** ZX81, TS 1000

Turn your computer into a drawing board. Visible flashing cursor even while re-tracing. 1K.

Skew-a-Sketch

EZRA GROUP II **Date:** 1982 **Price:** \$1.00 **Platforms:** ZX81, TS 1000

Like Etch-a-Sketch. 1K.

Space Adventures Coloring Book

Zebra Systems, Inc. **Model:** C262 **Date:** 1985 **Price:** \$7.95 **Platforms:** TS 2068

Contains pictures of space ships, astronauts, and alien creatures. For use with Zebra graphics tablet.

Super-Draw

Crockett Software **Price:** \$7.95 **Platforms:** TS 1000

All characters, 3 cursors, screen fill, etc. Save finished/unfinished pictures. 16K.

Tech-Draw

Zebra Systems, Inc. **Model:** C254 **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068

High resolution black and white drawing utility inspired by MacPaint for the Apple Macintosh computer.

For use with the Zebra Graphics Interface and Graphics Tablet, Tech-Draw allows for drawing curves and freehand. Supports many popular printers.

TechDraw Jr.

Zebra Systems, Inc. **Model:** C256 **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068

High resolution black and white drawing utility inspired by MacPaint for the Apple Macintosh computer. This version does not require or support the Zebra Graphics Interface and Tablet.

The Drawing System

Word Software **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000
Machine language drawing program that features 8-directional drawing. 3 drawing modes, full ZX character set, 'smart' cursors, line and screen fill, output to TS 2040 or CAI printers, screen overlaying from tape or memory, and selectable speed repeating keys. 16K.

Thrust

Weymil Corporation **Date:** 1986 **Price:** \$20.00 **Platforms:** TS 1000
Combination of SincArtist and SincArtist HR.

TS-Artist (The Artist)

KSOFT **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000
Create drawings and paintings on the screen. Features user's choice of brushes and backgrounds, free mixing of graphics and alphanumerics. Easy specification of lines and circles, ability to store complex patterns and reproduce them anywhere on the screen. Program has more than 20 commands to help create drawings and paintings on the screen. Artwork can be saved on cassette or printed. 16K.

Video Graph

Prism Microproducts **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Enables you to create pictures which may be stored and merged. 16K

Video Sketch

Prism Microproducts **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Use the full graphics capabilities of the TS 1000: draw, type, use large alphabet and reverse images. 16K.

TRANSFORM SALES DAY BOOK 1

- 1. TO MAKE ENTRIES
- 2. TO LIST ENTRIES
- 3. TO OBTAIN TOTALS
- 4. TO SEARCH
- 5. TO SAVE THE PROGRAM
- 6. TO ENTER PAID INVOICES
- 7. TO CORRECT ERRORS
- 8. TO LOAD ANOTHER PROGRAM
- 9. TO CLEAR ALL TOTALS

"█"

Business

One cannot accuse Sinclair owners of not trying to use their computers for serious business work. Everything from accounting to mailing lists to highly specialized business software was available for the TS 1000 and TS 12068. Business owners could and did run their operations on these computers.

2 Program Advertising Package

Computer-Wear Software **Date:** 1983 **Price:** \$25.95 **Platforms:** TS 1000

Designed by an advertising director, these programs take the guesswork out of production, lists and mailing costs, quotas, risk summaries, P & L, data bases, advertising planning, evaluation and analysis. 16K.

5 Business Programs

Custom Electronics Device Corp. **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000

Business Forecasting: Uses moving average method. Ratio Analysis: Uses current ratio, net profit to sales, investment turnover, earnings on interest, inventory turnover. Break Even Analysis: Uses break down of costs. Try Before You Buy: Calculates monthly cost.

Accounts

Personal Software Services **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Small business or home accounting system. 200 record transaction file which can be searched, printed on displayed. 16K.

Accounts Pay-Master

Master Mind, Ltd. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Automatic due date ordering, review by account. Up to 200 entries. 16K.

Accounts Payable

M. Sieder **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000

30 accounts by name and number with 10 entries each plus balance. Schedule of accounts payable, transfer of balances for new entries plus printout. 16K.

Accounts Payable

Solid Software **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000, TS 1500, TS 2068

Home or small business accounts payable. 30 accounts. User friendly with

graphic displays. 2068 version has expanded features.

Accounts Payable/Receivable

Executive Workshop **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000

Includes listing for up to 100 accounts. Keeps track of date of last transaction and amount due. Search by name or number. Lists total accounts payable/receivable. 16K.

Accounts Receivable

M. Sieder **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000

30 accounts by name and number with 10 entries each plus balance. Schedule of accounts receivable, transfer of balances for new entries plus printout. 16K.

ACZ Check Register

Cottage Technology **Author:** Alan R. Czarnek **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Balances checkbook, summarizes expenses by accounts. Allows allocation of one check to several accounts. Can directly transfer accounts summary into ACZ General Ledger.

ACZ General Ledger

Cottage Technology **Author:** Alan R. Czarnek **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000

Double entry accounting system; menu driven; generates trial balance, income statement, balance sheet, statement of owner's equity, and a post-closing trial balance; includes many options. 16K.

ACZ General Ledger 2000

Cottage Technology **Author:** Alan R. Czarnek **Date:** 1984 **Price:** \$39.95 **Platforms:** TS 2068

Double-entry accounting system. Reports include income statement (P&L), balance sheet, equity statement, journal entries, ledger detail, chart of accounts, monthly and year-to-date statements. Up to

Software

800 entries/mo across 150 accounts. Interfaces with Cardco numeric keypad.

Address File/Mailing List

BASCO **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Menu driven program allows name, address, and 2 lines of misc. information. The file can be searched using any piece of known information. 16K.

Advanced Budget Manager

Softsync, Inc. **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000

Combines a financial data base with a forecasting program. Choose from the menu to input or review data, analyze income/expense (projected and actual) by month, category or by total; six income and twenty-four expense categories; built-in save feature and print routine; easy to operate with self-explanatory instructions. 16K.

Air Conditioning Requirements

Utilities Engineering **Date:** 1983 **Price:** \$29.00 **Platforms:** TS 1000

Calculates the air conditioning for input of square feet of floor area. Data on 32 types of buildings. 16K.

Amortization

Signature Software **Date:** 1984 **Price:** \$16.95 **Platforms:** TS 1000

Compute payments, amortization schedule. 16K.

Amortizations

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Annuity Evaluation

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

APOD

George Bezushko **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Real estate management software. Manage 20 properties, 15 operating expenses, calculate monthly mortgage. 16K.

Appointment Calendar

Markel Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000, TS 2068

Up to 8 appointments per day for up to 31 days. Change or delete any appointment. Print a list of appointments for day or month. Save all appointments on tape. 16K.

Appointment Calendar

Simulusion **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Keeps memos for any date. Produces a full screen calendar for any month with appointments highlighted. Type the appointment day, and the memo appears. Appointments can be easily added, updated, and cleared. Telephone Address and Mailing List: Recall entries by name or category (e.g., Christmas list, bills). 16K.

Appointment Planner

RAMEX International **Price:** \$9.95 **Platforms:** TS 1000

Appointment Planner

CRC Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Keeps track of all your appointments. Lets you list out your appointments by day, month, or you can search for any appointment. Includes any year perpetual calendar. Dates on which you have any appointments blink. 16K.

Auxiliary Bank Book

M. Sieder **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000

Work sheet with distribution, totals, and printout for G/L entries of 45 check in and 30 check out per day plus deposit slip printout. 16K.

Software

Bill Master

CRC Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Tells you with blinking calendar your financial timetable. Tracks paid and unpaid bills with subtotals and totals. 16K.

Billtex

Computech **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000

Accounts receivable. 100 accounts per session. For use with full-size printer. 64K.

Bookkeeping

Glenwood Studio **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000 16K.

Bookkeeping

Discount Software, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
General bookkeeping system.

Break-Even Analysis

Executive Workshop **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000

Computes unit sales and dollar volume of sales necessary to reach a break-even point, beyond which profits are gained. Various retail prices can be input to test their effects on the break-even point. 16K.

Business #1

S & S Company, The **Model:** T1401/T2401 **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000, TS 2068

Checkbook: transaction and expense categorization with bank reconciliation. Aconpay: accounts payable/lists and sorts unpaid bills.

Business #2

S & S Company, The **Model:** T1501/T2501 **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000, TS 2068

Acorec: accounts receivable/keeps track of unpaid receivables. Cufile: receipt or invoice preparation the monthly file.

Avon

Rheesware **Date:** 1984 **Price:** \$12.95 **Platforms:** TS 2068

Home business manager.

Bank and Tax Register

Simulusion **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Check register to store a year's transactions: number, date, category, and amount for each item; recall by any combination of factors. Easily add, change, and delete entries. Can print with headings on screen or printer with totals and grand totals. 16K.

Bank Statement Balancer

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Bar Charts

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Bar-Chart

Biocal Software **Date:** 1983 **Platforms:** TS 1000

Watch the fluctuations in your expenses. Plots numeric arrays using a scaled histogram.

Basic Business I

Data-assette **Date:** 1982 **Price:** \$16.95 **Platforms:** TS 1000

Cash flow control and planning. 16K.

Berger Prescription Hearing Aid Fitting System

Data Services **Date:** 1983 **Platforms:** TS 1000

Program for audiologists. Prompts for audiometric test data and produces results that the audiologist can use in selecting the appropriate hearing aid. 16K.

Best of Business and Utilities

Byte Power **Date:** 1988 **Price:** \$19.00 **Platforms:** TS 2068

Software

Business #3

S & S Company, The **Model:** T1502/T2502 **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000, TS 2068
Inventory: multi-field sort with cost-totaling feature. Mailer: makes name and address labels.

Business #4

S & S Company, The **Model:** T1503/T2503 **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000, TS 2068
Job Quote: versatile estimating program. Break Even: production analysis.

Business Pack I

Gladstone Electronics **Author:** James Biers **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000
Programs to help you manage your cash flow, measure your rate of return, keep track of depreciation and establish your production and sales break-even levels. Two tapes. 16K.

Business Pack II

Gladstone Electronics **Author:** James Biers **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Project scheduling: track of project hours, billings, variances and staff work loads. 16K.

Business Start-Up Pak #1

SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Several programs for prospective businesses. Break even with direct and variable costs; how much you will need to sell to get your money back. Pay back: should you buy that piece of equipment? 16K.

Business Stock Control Program

M. A. Smith **Date:** 1983 **Price:** \$38.00 **Platforms:** ZX Spectrum

Business Subroutines Package, Combo I

JPR Software, Inc. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Future value; time periods; present value; interest rate.

Cash Flow Forecaster and Budget Analysis

Data-assette **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000
Keeps detailed records for twelve months in the three major categories. Income, fixed and variable expenses plus loan balance or line of credit. Provides the user with the ability to forecast or track the history of his cash flow.

Cash Register

Heath Computer Services **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Totals, figures sales tax, clears and keeps daily totals.

Chart Master

L. Harmon **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
Generates and analyze bar charts, print results. 16K.

Check Register

Theodore J. Dunn **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000
16K.

Check Register, Inventory

Brittanysoft Ltd **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
16-64K.

Check Stub

Sourceware, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Checkbook Simulator

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
16K.

Checking

Heath Computer Services **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Lists (25 in 16K, 100 in 64K) deposits showing amount and date entered. Lists (80 in 16K, 500 in 64K) checks and displays check number, date and payee. Lists by account total of checks written. Keeps running total of checks written and balance left in account. Adds interest and subtracts service charges. Search for a check by number, name, date or amount. Print a list of deposits, accounts, and checks with printer. 16-64K.

Checking Account

Custom Electronics Device Corp. **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Designed to work with E-Z Bookkeeping but can be used alone. Keeps up to 200 checks in one file. Checks are numbered automatically; categorize by account or vendor number. Enter a number and the name is typed for you. Accounts and vendors can be changed. 16K.

Client Data File

Theodore J. Dunn **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000
16K.

Clients

Biocal Software **Date:** 1983 **Platforms:** TS 1000
Mailing list keeps track of your clients using ISAM techniques to maintain the file.

Construction Estimator

GO Industries **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000
Leads user through a series of lists, charts, and schedules to establish construction cost estimate. Material, labor, and subcontract amounts. Part of a series of design and construction programs for the owner-builder and contractor.

Software

Construction II

Rod Callahan **Date:** 1984 **Price:** \$30.00 **Platforms:** TS 1000
Four programs which calculate bill of material and construction costs from ground up. Leads user through by asking for the specific data necessary for completion. On two cassettes.

Critical Path Analysis

Hilderbay Ltd. **Date:** 1981 **Price:** \$19.95 **Platforms:** TS 1000
Picks out the steps in a project that could become bottlenecks, monitors costs, spots effects of delays. Some steps must be completed before the next can begin; others can be delayed without slowing up the project as a whole. 16K.

Critical Path Analysis

Timex Computer Corporation **Model:** 03-1003 **Author:** W. Emery **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000
Allows identification of critical activities in a project, and scheduling of events for efficiency and economy. Management applications include design and engineering projects, routine in emergency maintenance, product marketing, industrial design, or any project involving many phases. Personal uses include home construction tasks, scheduling activities, or developing long-range projects. Computer does a tabular analysis and identifies the critical path. Activity costs can be entered, compared, manipulated, and printed. You can substitute alternate activities and analyze their effect on the project. Substitute new cost figures trade-offs /cost alternates, and consider their effect on speeding up the project. 16K.

Customer/Supplier File

Executive Workshop **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000
Keeps track of 100 customers or suppliers, their phone numbers and two 18 character product code (or other) listings. Includes add or delete function; change phone number or product code listing. 16K.

Software

Data Filer

Dynacomp, Inc. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000 16K.

Data Putting

Asia Tsucho Co., Ltd. **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
Outputs distribution ratio of the total by grouping every and all the data input; displays a linear graph of the ratio. Especially suitable for uses such as calculating the amount sold, the purchasing cost, and expenses. 16K.

Decision Making

SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Sophisticated approach to computer-aided decision making, based on research. Breaks down multiple problems into manageable sets, making decisions as you would. 16K.

Demo Sales Program

Computer-Wear Software **Date:** 1983 **Platforms:** TS 1000
Package for retailers, distributors, and marketing managers. Demo was designed to help sell more merchandise. 16K.

Depreciation (ACRS)

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Depreciation Declining Balance

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Depreciation Schedule

Executive Workshop **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000
Compute equipment depreciation on the straight line, sum-of the years-digits or double declining balance. Special feature: double declining balance converts to straight line according to the proper ac-

counting formula and allows for a salvage value of when required. 16K.

Depreciation Straight Line

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

E-Z Bookkeeping

Custom Electronics Device Corp. **Price:** \$19.95 **Platforms:** TS 1000
For small business, department in a large business, homemaker. Set up numbered accounts; vendor list. Take expenses from check book and/or receipts and enter. Computer categorizes and totals for last period, totals to date.

Easy Z Accounting

Sensible Technical Solutions **Date:** 1983 **Price:** \$20.00 **Platforms:** TS 1000
Complete double entry accounting system. Journals (cash receipts, cash payments, purchases, sales, general, and petty cash). Ledger (cash, expenses, inventory, merchandise sales, merchandise purchases, other accounts) can be entered to customize program. 16-64K.

Execu-Soft

ORBYTE Software **Date:** 1983 **Price:** \$128.00 **Platforms:** TS 1000
7 programs for the small business: customer credit file; general ledger; execu-diary; execu-address and phone file; accounts payable; accounts receivable; inventory. 16K.

Executive's Calendar

Games to Learn By, Inc. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 2068
Plan a single day, week or six months ahead. Open days and times are clearly noted. Will handle up to 7 appointments or tasks on a given day.

Expected Value Computation

Executive Workshop **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000
Computes potential return on various projects. Used to analyze business decisions by the statistical method of expected value. All possible outcomes are weighted to arrive at a reasonable expected value. 16K.

File Manager

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Finance Manager for Spectrum and TS2000

Oxford Computer Publishing Ltd. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2000, TS 2068, ZX Spectrum
Handles over 2000 entries in up to 255 separate accounts. Full Screen input, cursor control, and amendment, makes this program particularly easy to use. Facilities include automatic double entry, instant account balances, regular payment facility, and cash flow calculations. Individual accounts may be listed, updated or printed out.

Financial Package

Executive Workshop **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000
Computes: installment payments with interest on unpaid balance; installment payments with add-on interest; loan amortization with annual, semi-annual, quarterly, or monthly payments and remaining balance table; savings account interest compounded daily. 16K.

Financial Planner

Mohr and Associates Corp. **Date:** 1983 **Price:** \$25.00 **Platforms:** TS 1000
Software for the insurance agent. Balances the client's assets, provides retirement and insurance planning. 16K.

Software

Financial Ratio Analysis

Executive Workshop **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000
Accepts various figures from a company's income statement and computes 11 ratios including assets to debt, debt to worth and average collection period. Flags potential problem areas. Provides the most accepted method to measure the financial stability of any company. 16K.

Forecasting and Graphs

Mindware, Inc. **Date:** 1983 **Price:** \$22.95 **Platforms:** TS 1000
Takes raw data and projects sales, profits, inflation, and other trends. Computes a moving average that smooths out seasonal and random fluctuations. Stores up to 15 time series of 60 periods each. Analyzes growth rates, correlates two separate trends, computes mean and standard deviation. Results can be displayed in graph form. 16K.

General Ledger

M. Sieder **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000
30 identifiable balance and profit and loss accounts. Ten entries each per account. Trial balance and daily profit and loss statement, printout, transfer of balances for new entries. 16K.

Graphpak

Practical Computer Products **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Present numerical information in a visual format: bar graphs, line graphs, pie charts, and area graphs (rectangles divided to show percentages). Graphpak plots scientific data and assists in business and family financial planning. 10K BASIC program. 16K.

Histogram

Biocal Software **Date:** 1983 **Platforms:** TS 1000
Category maintenance, transact data entry, category plots, totals, and averages per category.

Software

ICP/1

Support Systems One **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000
Inventory control, menu driven, auto run, nine pre-selected data fields in one file. Features: Auto file- search, file cre- ation, file deletion, change data fields, in- teractive receive and shipment programs, item sales history to date; up to 200 files. 16K.

Inex

Dale Lipinski Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Income and expense sheet style pro- gram for purchases, payment, interest, be- ginning balance and current balance. More than 99 user accounts including standard deductions, net pay and total income. Add/ delete account names, list to screen or printer, transfer balances to set new ac- count period. 16K.

Inven

Dale Lipinski Software **Price:** \$10.00 **Platforms:** TS 1000
Total inventory accounting program. Quantity purchased, sold, balance on hand, cost, replacement costs and accrued values. Search or change item by descrip- tion, category or stock number. A descrip- tion of 32 characters and stock number of 3 digits has 103 entries in 16K.

Inventory

Glenwood Studio **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
16K.

Inventory

R. A. Tec. **Date:** 1983 **Price:** \$13.00 **Platforms:** TS 1000
Keep track of your inventory; holds up to 300 items per tape. Each item includes: name, code number, quantity, and 2 ven- dors. Menu and INKEY\$ driven. 16K.

Inventory

M. Sieder **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000
30 identifiable items and numbers plus 10 entries each, instant balance, inventory listings with total movement/item, transfer of balances and printout. 16K.

Inventory

Heath Computer Services **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
May be used for everything from keep- ing an accurate inventory for businesses to personal record collection. Holds up to (150 16K) (750 64K) items with comments for each. Comments may be used for serial numbers, dates, prices or location. Lists all items, search for single item, change or delete any item. Sort items in alphabetical or numerical order. Prints a list of items, quantities and comments. 16-64K.

Inventory

Magic World Software **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000
Tape of program presented in Syntax v4 n10.

Inventory Control

Timex Computer Corporation **Model:** 03-1001 **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000
Track up to 150 items. Automatic over- stock/under-stock detection, search for an item, delete, add a new item, input a new inventory list. 16K.

Inventory Control

Hilderbay Ltd. **Date:** 1983 **Price:** \$22.95 **Platforms:** TS 1000
Two programs to track inventory. Stock I: Keeps track of 400 line items, with prod- uct names and descriptions, unit prices, supplier codes, stock levels, and reorder points. Changes in prices, codes, and dele- tions easily done. Provides alphanumeric list of items or breakdown by type of sup- plier. Stock II: A simpler program that al- lows for 2000 items. Updates on both pro- grams take only seconds. 16K.

Inventory Control

Data-assette **Author:** John Powers **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000
Stock control of units and of value, with separate routines for receipts and returns or sales and shipments. Special routine for adjustments in units or values. Program uses average cost of inventory value and shipments. Allows the user to sort by code or alpha name. Quick access to stock lev- els. Stand alone control or it will operate with the ZX-99 tape control system for file handling. 16K-64K.

Invoice Control

Markel Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Track and print invoices for small busi- ness. Will hold (20/16K) (120/64K) invoices of up to (5/16K) (10/64K) lines each. Re- view or change any invoice, list all invoices, list invoices with an open balance, enter ad- ditional payments and review invoices writ- ten to a particular account. Prints your com- pany name and address on each invoice. 16-64K.

Invoice Control II

Markel Software **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 2068
Track and print invoices for small busi- ness. Review or change any invoice, list all invoices, list invoices with an open balance, enter additional payments and review in- voices written to a particular account. Prints your company name and address on each invoice.

INVZXTROL

Rafael Ceja Beltran **Date:** 1983 **Price:** \$20.00 **Platforms:** TS 1000
Controls up to 200 items (up to 750 items with 64K). Includes description code quantity in stock and price; menu driven. Total control on inputs/outputs; written in BASIC. Prompts and all the instructions are written in Spanish. 16K-64K.

Software

IPI

T. L. McDonald **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Item Processor & Inventory. Holds about 300 items; alphabetizes, searches, graphics display of quantity of items. 16K.

LANDLORDS

Hale Software/EMSoft **Date:** 1984 **Price:** \$21.95 **Platforms:** TS 1000
Rental property management software for the ZX81/TS 1000. 175 transactions in 16K. Auto-sort by date of transaction; auto prep of tax return; review by many criteria. Expandable to 64K.

Ledger

Dale Lipinski Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Double entry journal and ledger; single entry to both a credit and debit account. Date, check number, amount, credit and debit accounts, memo; define and classify your accounts; self-expanding to RAM over 16K. 100 transactions to 50 accounts in 16K; over 700 in 32K. In BASIC for user modification.

LOAN\$

Hybrid **Date:** 1984 **Platforms:** TS 2068
Find interest rate, principal, regular an final payment, balance, term and amortiza- tion schedules for each payment of each year, and summaries.

Mail Master

L. Harmon **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
Mailing list program. Includes full edit and search routines. Supports any compati- ble printer. Options include: add names, search/view, edit, search/print, prints com- plete list, inform, and others. 16K.

Mailing List

Heath Computer Services **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000, TS 2068
Holds (100 16K) (425 64K) names, ad- dresses and telephone numbers. Search by

Software

name, city, zip code, or phone number. Will sort by name, city, or zip code in alphabetical or numerical order. Lists all names, changes or deletes. Prints list of names or names and addresses or address labels if they are available for your printer.

Mailing List

ELCOMP Publishing, Inc. **Price:** \$19.95 **Platforms:** TS 1000

Mailing List

Discount Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Create, manage mailing lists.

Management Decisions

Sophia Systems **Date:** 1983 **Price:** \$14.00 **Platforms:** TS 1000
Analyze a break even point, optimum quantity to order, make/buy decision, profit margin, markup, and price elasticity. 16K.

Manufacturing Control

Timex Computer Corporation **Model:** 03-1002 **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000
Comprehensive manufacturing system that lets you analyze labor and material costs for up to 150 products. Ideal for small businesses manufacturing a number of different lines. You can improve your planning and financial control by closely watching all stages of the job from order to shipment. Monitor cost factors, track work in progress, keeps a daily account on the details that mean profit or loss to your business. Track new orders , inventory levels, and delivery dates. 16K.

Mega 2068 Software

Datacon Corporation **Date:** 1983 **Platforms:** TS 2068
Series of programs that promised to improve on the original versions with a graphical user interface (“desk top organizer like the Apple Lisa”). Based on the Mega Software for the TS 1000.

Mega Software

Datacon Corporation **Date:** 1983 **Platforms:** TS 1000
The Mega series of programs were developed and marketed by Datacon. There were three groups of programs: Mega Master, Mega Wealth and Mega Home.

The master group included a spreadsheet, word processor, data base, statistical organizers and graph plotter.

The wealth group was intended to support a small business. It consisted of invoicing, accounts receivable, accounts payable, inventory management and net earnings programs.

Mega Master

- Mega-Calc
- Mega-Desk
- Mega-File
- Mega-Lex
- Mega-Plot
- Mega-State

Mega Wealth

- Mega-Bill
- Mega-Earn
- Mega-Net
- Mega-Pay
- Mega-Stock

Mega Home

- Mega-Mail
- Mega-Plan
- Mega-Probe

Mega-Bill

Datacon Corporation **Date:** 1983 **Price:** \$24.50 **Platforms:** TS 1000
Invoicing program with automatic entry of constants like sales tax, freight, handling, prices, item descriptions, etc. 16-64K.

Mega-Earn

Datacon Corporation **Date:** 1983 **Price:** \$24.50 **Platforms:** TS 1000
Handles posting to all accounts and develops a sales journal with statistical totals. It also develops a cash receipts journal,

performs aged trial balances on receivables and other functions. 16-64K.

Mega-Net

Datacon Corporation **Date:** 1983 **Price:** \$19.50 **Platforms:** TS 1000
Develop profit and loss statements, as well as balance sheets, from data stored by other programs in the Mega Wealth group (Mega-Bill, Mega-Earn, Mega-Pay, Mega-Stock). 16-64K.

Mega-Pay

Datacon Corporation **Date:** 1983 **Price:** \$24.50 **Platforms:** TS 1000
Posts payments to their proper accounts, produces an accurate check register, and can prepare check stubs with 2040 printer. 16-64K.

Mega-Stock

Datacon Corporation **Date:** 1983 **Price:** \$18.50 **Platforms:** TS 1000
Inventory program. Tracks back orders, vendors, stock values, quantities on hand and minimum balances. 16-64K.

Money Analyzer 2

Timex Computer Corporation **Model:** 02-1002 **Author:** T.J. Software **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Three programs: depreciation, present worth, and rate of return calculations. Depreciation: A quick program for depreciation by three alternative methods: Straight Line, Sum-Of-The-Years-Digits, and Declining Balance. Present Worth Comparison helps you make buying decisions by comparing the present value of your alternatives. Rate of Return helps you make investment decisions by calculating the rate of return on alternative investments. 2K.

Money Managers

S & S Company, The **Model:** T1402/T2402 **Price:** \$19.95 **Platforms:** TS 1000, TS 2068
AMORAN, AMORSAVE, INVESTOR: mortgage payment, pre-payment & investment analysis.

Software

Orders

Biocal Software **Date:** 1983 **Platforms:** TS 1000
Order tracking system with mailing list, maintenance, sort, report, plot.

Paydata 2E

21st Century Electronics **Date:** 1983 **Price:** \$34.95 **Platforms:** TS 1000
Complete payroll program for 25 people. Includes hard copy mode for pay stubs, and accountant information, automatic overtime calculation and all federal tax deductions. 16K.

Payroll

Games to Learn By, Inc. **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068
Flexible entries allow you to tailor this program to your needs. Up to 30 employees in each file with all appropriate payments, deductions and proper stub notations.

Perform Energy Audits

Technology Products and Services, Inc. **Date:** 1983 **Price:** \$49.95 **Platforms:** TS 1000

Personal Secretary

Zebra Systems, Inc. **Model:** C276 **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068
64 column program which features an automatic monthly calendar in one window, menus in another window and your database information in a third. Store and manage 200 appointments and 50 phone numbers with addresses. Requires OS-64 Operating System cartridge.

Press Release Mailing List

Stuart Software **Date:** 1983 **Price:** \$25.00 **Platforms:** TS 1000
Print one-across mailing labels in Zip code order. Includes mailing list for sending out press releases for computer-related products, contains about 400 periodicals. 16K.

Software

Pricing Programs

Executive Workshop **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000

Computes variable and fixed costs and provides retail prices with various mark-ups. User can set margin of mark-up or total profit required. 16K.

PRO

Pankow Engineering Company **Date:** 1984 **Price:** \$245.00 **Platforms:** TS 2068

Computer-aided drafting program. Does not produce a record-quality drawing; designed for land surveyors and subdivision designers.

Profit Plan

RCO Technical **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Profit analysis. Calculates breakeven point, profit projections using entered fixed and variable cost data.

Project Scheduler and Proposal Sheet

Gladstone Electronics **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Project Scheduler: Record project estimated hours, hours to date, remaining hours. Record billing rate, employees involved. Display amount billed, current billing, estimated billing remaining. Proposal Sheet: Record work items and hours. Record hourly billing rates. Display overheads, material cost and labor totals. 16K.

Property Manager

Data-assette **Author:** John Powers **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000

Provides for any combination of 10 units in 2 buildings or 2 units in 5 buildings per program. Tracks rent for each unit in up to 15 variable expense categories and 15 fixed expense lines, for a full year. Optional save routines for the ZX-99.

Quadra-Chart

Timex Computer Corporation **Model:** 06-1003 **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

Develop numerical charts and use that data to produce color graphics of bar graphs, pie graphs and line graphs. A single set of data can be displayed as four different charts.

Real Estate Advisor

Run-It Software Club **Date:** 1982 **Price:** \$10.95 **Platforms:** TS 1000

Organize the information you need to keep investments, expenses and cash flow in control, plus calculate rate of return on your investment. Real Estate Advisor also lets you do budgets, projections and shows you the results of what-if situations and calculate estimated future rates of return. 16K.

Real Estate Investing

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Real Estate Investment Analysis

Timex Computer Corporation **Model:** 03-2012 **Author:** American Micro Products, Inc **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Provides the user with two different investment strategies. The first selection allows the user to choose between renting or buying the real estate. The second selection consists of a detailed analysis of the rental investment property.

Sales

Biocal Software **Date:** 1983 **Platforms:** TS 1000

Inventory sales analysis shows you what is selling best, how many were sold, and total sales dollars.

Sales Aid 1

M. Sieder **Date:** 1983 **Price:** \$25.00 **Platforms:** TS 1000

Determine which customers are profitable, prepare forecasts. 16K.

Software

Service Department Records

Randy Campbell **Date:** 1983 **Price:** \$25.00 **Platforms:** TS 1000

Summarizes records for a machine service operation; records and summarizes technician number, call codes, and machine model. Up to 25 variables; gives percentage of calls for each call code, technician, and machine.

Statistics

Timex Computer Corporation **Model:** 02-1000 **Author:** R. Daniel **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Stock

Dale Lipinski Software **Price:** \$10.00 **Platforms:** TS 1000

Keep count of items. Add, delete, search, change items by description, item number or category. Complete list to screen or printer. With 16K RAM & having an average description of 32 character and a 3 digit item number you would have 197 items. A 20 character average would be 265 items.

Stock Market Tech. Analysis I

Timex Computer Corporation **Model:** 03-1005 **Author:** T. H. Nooter **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000

Ideal for stock technicians. Plots up and downside trends of stock price movement. The stock analysis and plotted graphs can be used to plot trends as a guide to your buy/sell transactions. Was Nooter Stock Program. 16K.

Stockbook

A. Parsons **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Keep records of 400 lines of stock, quantities of up to 255 cost and selling prices of up to \$655. Stock levels adjust as subs are entered, Prints stock tickets and full stock list. 16K.

Sales File

Heath Computer Services **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000

Holds (150 16K) (600 64K) products with wholesale and retail prices. Shows separate wholesale and retail totals and amount of profit in up to (25 16K) (100 64K) different accounts. Records inventory automatically or manually. Totals sales tax. Cash register mode totals, identifies, adds sales tax. and keeps records for your book-keeping. Prints a list of products, accounts, inventory and sales slips with printer. 16-64K.

Sales Journal

M. Sieder **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000

Work sheet for cash, check, accounts receivable and sales giving printout of detailed distribution and totals for general ledger entry plus verification. 16K.

Sales Trend Analysis

Executive Workshop **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000

Charts and computes highs, lows, averages, and increase (decrease) over previous years. In choice of four formats: 12 month: \$1500 or \$15,000 monthly sales; 24 month: \$1500 or \$15,000 monthly sales; 12 month: \$2000 or \$20,000 monthly sales; or 24 month: \$2000 or \$20,000 monthly sales. 16K.

Salesdata 2E

21st Century Electronics **Date:** 1983 **Price:** \$34.95 **Platforms:** TS 1000

Complete sales storage and analysis report for up to 30 customers for a quarter year. In book form with master tape, 2 blanks, and documentation.

Savings/Investment Analysis

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Software

T/S Count

Pheonix Enterprises **Author:** Jim Payne **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000, TS 2068
Double-entry accounting package.

Tape (4) Business

Roman Software **Date:** 1982 **Price:** \$8.00 **Platforms:** ZX81, TS 1000
Salary, markup percentage, more. 8 programs. 1K.

Tax Favored Programs

Mohr and Associates Corp. **Date:** 1983 **Price:** \$25.00 **Platforms:** TS 1000
For the IRA, annuity agent. Gives comparison of other financial packages such as CDs, mutual funds vs. tax deferred annuities (KEOGH/IRA/TSA/SPD A/Flexible Annuities). 16K.

Tele Memo

M. Sieder **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000
15 memos of 500 bytes each, plus date, address, subject and signature for storage, telephone transmission and print-out. 16K.

The Bookkeeper

Gibson Data Services **Date:** 1984 **Price:** \$25.00 **Platforms:** TS 1000, TS 2068
Up to 900 journal entries; 99 user-definable account names. Check register maintenance. Reports for journal with comments; ledger by account, date or all; chart of accounts; income statements; balance sheets.

The Financial Manager and Record Keeper

Softsync, Inc. **Date:** 1982 **Platforms:** TS 1000
Small business budget management and record keeping. 16K.

The List Manager

Timex Computer Corporation **Model:** 03-1004 **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Mailing List and Phone Book. Mailing List tracks personal or business mailing lists of up to 115 names by name, address and zip code. Phone Book tracks personal or business numbers for up to 180 names. 16K.

The Wiz

S.B.C. Software **Date:** 1984 **Price:** \$69.95 **Platforms:** TS 2068
Small business accounting system. Include payroll, inventory, accounts receivable, accounts payable and general ledger modules. Screens are formatted for 64 columns, requires TASWIDE.

Timex Accounting

Berry **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Income tax, payroll, amortization schedule.

Treasurer

A. Parsons **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Keeps records of up to 15 columns, user-defined either credit or debit, 400 entries can be made with date and detail shown. Balance readily accessible. Full accounts can be printed. Plus address book for 110 names and addresses. Search by name, category number, town, street, even part of a name and print mailing labels. 16K.

TS Demo

K. Roberts **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Demonstration tape for retailers to increase sales or for anyone wanting to show off the computer.

Software

Universal Address List

H & H Electronics **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Menu driven, program includes locations for name, address, telephone, and an extra line for comments. Includes complete editing functions; before, and after entry. Some uses include: Xmas card list, telephone number of files. 16K.

Universal Inventory File

M. C. Hoffman **Date:** 1982 **Price:** \$16.95 **Platforms:** TS 1000
Files created by menu and prompts; two ways to search; start new files, add, delete, check, and more. 16K.

Universal Mailing List

M. C. Hoffman **Date:** 1982 **Price:** \$10.95 **Platforms:** TS 1000
Customized version of Universal Inventory File. 16K.

ZX Inventory

Servitronics **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000
Storage of 200 items and prices. 16K.

ZX80 Business Package

Lamo-Lem **Price:** \$9.95 **Platforms:** ZX80
Three programs: Search and Save: Stores and retrieves keyed files on tape. VideoComp4: Manipulates 3 columns of 16 elements; performs integer operations on one element or an entire column. VideoGraph: Produces a bar graph from the VideoComp4 results. Manual, two reference cards, file record sheet, and color keyboard overlay. 1K.

```
ZX PRO/FILE
ENTER A SEARCH COMMAND
OR TYPE "A" TO ADD
      "SAVE" TO SAVE
SPACE OPEN: 4949 SLOTS
```

```
SEPARATE MULTI-WORD
COMMANDS WITH A "/"
TYPE "AUTO" FOR AUTO-SEARCH
      "DEFP" FOR PRINT FORMAT
```

```
PRINT STATUS
START/NO./SPACE
  1      4      1
"█"
```

Database

Databases were one of the trinity of “serious” programs (spreadsheets and word processing software were the other two elements). Any TS owner who was serious about using his or her computer for “real” work needed a database to track inventory, hold client address information et cetera.

Some databases were highly specific, designed for addresses or household inventories. Others, like ZX Pro/File, allowed the user to enter information in a free-form manner and manipulate it to produce mailing labels and other reports.

At the time, the vast majority of database products referred to their data as “files,” invoking a card file or file cabinet metaphor for collections of records.

ACCR

R. S. Panwar **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Stores and retrieves information by user defined codes. Four fields of 6, 20, and 13 characters (for amount). 215 entries. Search 3 ways. Total for amount column. 16K.

ADDR

R. S. Panwar **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Stores and retrieves information by user defined codes. Stores 125 entries. Provides three fields of 1, 6, 84 character length; allows search by 1 or 6 characters. Used for lists of names, addresses, phone numbers. 16K.

Address Storage and Retrieval (ASR)

John Marion **Date:** 1985 **Price:** \$10.00 **Platforms:** TS 1000, TS 2068

Database to hold up to 320 names, addresses and phone numbers. Search by last name, city, state or zip code. 2068 version will sort by last name.

Address-A-File

Sourceware, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Autofile

Personal Software Services **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Electronic filing system: set up your own database. 16K.

Business/File Management Program

Computer Continuum **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Electronic file cabinet with sorting, editing and printer format commands. Ideal for mailing lists.

Catalog

Biocal Software **Date:** 1983 **Platforms:** TS 1000

Card file system. Uses indexed sequential access method (ISAM). Vary key and record sizes.

Cross-Referencer

Brown Cottage Industries **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

Stay on top of libraries, magazines, record collections. Cross-reference material by subject(s), title, date, author/artist, etc. Splits to create multiple programs as material grows. 16K.

Data Base/Fast File

Mindware, Inc. **Price:** \$49.95 **Platforms:** TS 1000

All-purpose business-oriented filing and reporting database. 16K.

Data Master

Timeworks, Inc. **Model:** 1307 **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

General information storage and retrieval system. Store information on such subjects as: Christmas card lists, recipes, club lists, client lists, vendor lists. For reference, information can be recalled by name, date, amounts, etc. 16K.

Data Master

L. Harmon **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000

Versatile data storage/retrieval program. Includes full edit and search routines. Supports any ZX/TS compatible printer. Includes comprehensive user's manual. 16K.

Data Master

SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Track and kind of data with custom searches, sorts and reports. 16-64K.

Software

Data Storage and Display System

ZX-Panding, Ltd. **Date:** 1982 **Price:** \$14.75 **Platforms:** TS 1000

Stores up to 60 data points in up to 25 files under user-defined titles. Data can be recalled in either a tabular form or as a solid graph with a data summary table. 16K.

Data-base

R. S. Panwar **Date:** 1984 **Price:** \$20.00 **Platforms:** TS 1000

Create your data base, retrieve, search, or edit; write files on tape; read files from tape; menu selected printout. File parameters and field names user defined; handles various kinds of data, e.g., mailing list, inventory, collections.

data-base 2x

Frog Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Database program suitable for telephone numbers, mailing lists, appointments, etc. Cross-references, supports printer.

Data-Manager

Computer Assistance Incorporated **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Screen prompted data collection system with formula fields and both form and spreadsheet display. 16K.

Design List

Pegasus Micro Systems **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000, TS 2000, TS 2068

16K.

Fast One, The

Campbell Systems **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000

A computerized filing cabinet. Stores, keeps track of, and instantly retrieves all kinds of data, e.g., mailing lists, inventories, personal finances, recipes, collectables, club membership lists. Data records can be updated and searched quickly. 16K.

Fast-file

Russell Brewer **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Menu-driven database. Fast machine code searching, comprehensive editing. 16K.

FASTFILE

Tom Cole **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 1000, TS 1500
Professional data management system. Sorts 1500 5-byte records in 24 seconds, 500 in 3 seconds. Searches through 1500 records in 1 second. Adds up 1500 decimal numbers in under 2 seconds. Built in word processor allows easy data entry. 4 data types store more information in less memory. Add, change, delete, print, search and query are all as easy as pointing your finger. Several different kinds of files can be in memory at the same time Complete query system answers 'How many?' 'How much?' or 'Which?' type questions. Manual includes information on how to create coupon/refund files, mailing labels, inventory control, address book, appointment scheduler/calendar and your own files.

Filed data 2E

21st Century Electronics **Date:** 1983 **Price:** \$28.95 **Platforms:** TS 1000
Database that stores names, addresses, zip, telephone number, and 2 lines of comment per entry. Alphabetical sort, change any part of an entry. 16K.

Filer

Solutions **Date:** 1983 **Price:** \$9.99 **Platforms:** TS 1000
Stores, sorts, and retrieves data. 16K.

Fylit

Biocal Software **Date:** 1983 **Price:** \$30.00 **Platforms:** TS 1000
User generated customized database applications. Requires 64K, CAI P40 printer, and CAI Exatron Stringy Floppy drive. 5 program overlays which share a common data file.

Software

independently from the program, and stored on cassette. Display formats are user-defined. Handles address lists, library catalogues, personnel files, stock inventories, school exam results, family trees and more.

MC Filer

Reindeer Enterprises **Date:** 1983 **Price:** \$17.85 **Platforms:** ZX81, TS 1000
General purpose database program with variable file length and up to six criteria per file.

Mega-File

Datacon Corporation **Date:** 1983 **Price:** \$21.50 **Platforms:** TS 1000
Database with flexible record site (up to 18 data fields), holds approximately 500 records in 64K. Records can be searched, edited, updated, altered, sorted, dated, calculated, merged. Sorts can be done based on a major and a minor criteria, allowing for very specific record selection. 16-64K.

Multifile

Bug-Byte Software **Price:** \$29.95 **Platforms:** ZX81
Multi-purpose database system. Number, size and headings of files are user-definable, string and numeric data. Files may be created, modified, replaced and searched. Comes with comprehensive documentation describing a host of applications for both business and personal use. 16K.

Multifile Plus

Bug-Byte Software **Price:** \$34.95 **Platforms:** ZX81, TS 1000
Improved version of Multifile to support 64K RAM.

Music Library

WMJ Data Systems **Platforms:** TS 1000, TS 2068
Data base management program that provides a convenient format for organizing your music collection. Allows you to store three lines of information (each 32 charac-

Go-fer

Speedware **Date:** 1983 **Price:** \$35.00 **Platforms:** TS 1000
Tape-based database that can store 23,800 bytes across 250 files. 20 fields per file. And/Or/Not searches, compressed data formats, repeating groups, variable length records, multi-screen I/O, search by heading or free text. 48-64K.

Go-fer II

Speedware **Date:** 1983 **Price:** \$100.00 **Platforms:** TS 1000
Expanded, disk-based version of Go-fer database; requires an AERCO disk system. Store more than 1,750 files per diskette and limitless data base size across multiple diskettes. 48K-64K.

Information 1000

Michael B. Williams **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Store names, complete addresses and phone numbers. Number of entries is limited only by free RAM. Provides search facility, output to printer, 10 options. 16K.

ISAM

Biocal Software **Date:** 1983 **Platforms:** TS 1000
Indexed Sequential Access Method subroutines allow you to retrieve your records via alphanumeric keys.

List

Dale Lipinski Software **Price:** \$10.00 **Platforms:** TS 1000
A data entry and retrieval program for groups of information. List up to 4 categories of your choice. View, add, delete, print or mass search any info in any and all categories. A 16K RAM will yield 150 entries with 8000 characters in the field but may be expanded with more memory.

Masterfile

Campbell Systems **Platforms:** TS 2068
Filing and retrieval system developed for the 48K ZX Spectrum; a version was adapted for the 2068. Offers about 32K of data per file. Files can be saved and loaded

Software

ters wide) on 100 or more items of music. You decide how to use the three lines, such as name of artist on line 1, album name on line 2, and favorite selections on line 3.

Personalized Flexible Data Base
Personal Computer Engineers **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000
Data base management system featuring variable length fields, indexing, multiple key searches. 16K-64K.

Pro/File 2068
Thomas B. Woods **Platforms:** TS 2068
Machine language information storage and retrieval database for the 2068. Later available as a DOCK cartridge with more memory for data.

Update July 1991: Using Tom Woods' 117-byte printer driver from his ProFile 2068 as an example, first load in the program, then make a save of just this block of code by using SAVE "filename" CODE 63672,117. The original beginning address for the block is 63672, and 117 is the number of bytes in the block.

Quick File
HD Software **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 2068

Screen-File
Banta Software **Date:** 1984 **Platforms:** TS 1000
Holds and searches files containing over 17,000 data characters. Each file holds name, address, telephone, key line, and up to 6 additional data lines. Locate files by name, number code, key line word.

Stor-A-Lot
Event Horizon Software **Date:** 1983 **Price:** \$7.50 **Platforms:** TS 1000
Full-featured mailing list/ address file. Complete search, edit, print facilities, and more.

Super File
Electro Research **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000 16K.

Sync Files
Sophia Systems **Date:** 1983 **Price:** \$20.00 **Platforms:** TS 1000
Customizable database. Add, change, or delete records. Search, sort or print on any field and more. 16K.

The Club Record Controller
Sinclair Research Ltd. **Date:** 1982 **Price:** \$17.95 **Platforms:** TS 1000
Holds names, addresses, phone numbers, and 5 additional categories for up to 100 members. 16K.

The Collector's Pack
Sinclair Research Ltd. **Price:** \$17.95 **Platforms:** TS 1000
Keep records of collection, up to 400 with 6 fields. 16K.

The File Developer
E & S Software **Date:** 1984 **Platforms:** TS 1000
Allows storage of 100 files over four parts.

The Organizer
Timex Computer Corporation **Model:** 03-2000 **Author:** Psion **Date:** 1982 **Price:** \$16.95 **Platforms:** TS 1000
Timex repackage of VU-FILE.

The Organizer
E & S Software **Date:** 1984 **Platforms:** TS 1000
Inventory program. Allows manipulation of items through add, alter, destroy, start from scratch.

VU-FILE
Timex Computer Corporation **Model:** 06-1001 **Author:** Psion **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 2068
Use electronic filing to store your lists. Create your own file and record layout, store data and retrieve information when

needed. Computer search facility makes it easy to find a single record. Cassette version for TS 2068.

VU-FILE
Sinclair Research Ltd. **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
High-speed storage and retrieval program. Access personal or business files almost instantly. Design or format files to suit specific needs and update/query them. Also published as The Organizer by Timex. 16K.

VU-FILE (cart)
Timex Computer Corporation **Model:** 07-1001 **Author:** Psion **Platforms:** TS 2068
High-speed storage and retrieval program. Access personal or business files almost instantly. Design or format files to suit specific needs and update/query them. Never released.

Z Extra
Sinware **Price:** \$19.95 **Platforms:** TS 1000
Display manager and data filing program in machine code. Provides a full screen editor for a direct keyboard-to-screen link with full editing and plotting features. Filing and display facilities permit page-flip animation or horizontal or vertical scrolling through windows. Stores up to 99 screens in 64K.

ZX Data Finder
Thomas B. Woods **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
High capacity file manager; versatile catalog/index/reference tool; edit, search, and display routines explained in text; a course on file and data storage techniques. 16K.

ZX Directory
Servitronics **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000
Sorts files alphabetically, storage of 60 files (16K).

Software

ZX Pro/File
Thomas B. Woods **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Machine language database with multi-word search, ordered displays, definable printer functions. Flexible file size, instant file access. 59 page manual and updates via newsletter. Available on ROM from ROMPAK. 16-64K.

ZX80/81 Database
Campbell Systems **Price:** \$20.00 **Platforms:** ZX80, ZX81
Blends BASIC menus with machine code to give dynamic file of name/address/ interest codes/text. Display formats include address labels for printing. Search any element type by any key. File data is packed into a single string; length is automatically adjusted for more than 500+ entries.

DOS and Disk Utilities

If you have a disk drive system, it stands to reason you'll need software to make it work or manipulate the disks.

For systems that were never intended to have disk drives, this can be a bit incongruous.

Bank Switching and Operating System (BSOS)

Hunter Electronics **Date:** 1985 **Price:** \$10.00 **Platforms:** TS 1000

Operating system for bank-switched memory on the ZX81/TS 1000. Documented in eight articles in T-S Horizons.

COMPUSA Disk Utilities

SiriusWare **Platforms:** TS 1000

Utilities for the COMPUSA floppy disk system for the TS 1000.

- Read/write to/from any memory address
- Read/write multiple track data files
- Read fractional tracks
- Automatic disk-to-disk copy
- Recover deleted tracks
- List directory of physical tracks

Disk File Manager

Chia-Chi Chao **Price:** \$13.00 **Platforms:** TS 2068

Copy individual files, even on a single drive system.

LarKen Disk Editor

LARKEN Electronics **Date:** 1989 **Price:** \$15.00 **Platforms:** TS 2068

Examine or change any byte on a LK-DOS disk. Useful in repairing damaged or glitched disks, changing the disk name or head speed, etc. You can also examine the track map and disk info headers.

Documentation for the disk editor also includes information on how to access LK-DOS from machine code and information on the structure of the disk catalog and data blocks.

LogiCall

RMG Enterprises **Price:** \$15.00 **Platforms:** TS 2068

Menu-driven overlay for LarKen LK-DOS. It handles file management functions and included utilities and improvements made to the BASIC drivers of many popular TS 2068 programs. LogiCall reduced the number of keystrokes required for LarKen's LKDOS. All the keys labeled by TIMEX for

DOS operation worked without being preceded by RANDOMIZE USR 100 or PRINT #4. Utilities included with the package allowed files to be passed from one application to another.

MakeDOS-64

RMG Enterprises **Date:** 1988 **Price:** \$15.00 **Platforms:** TS 2068

RP/M

AERCO **Date:** 1983 **Price:** \$69.00

Platforms: TS 2068

CP/M 2.2 option for the TS 2068 with AERCO FD-68.

Sektor 2068

RMG Enterprises **Author:** Mowgli As-sor **Date:** 1987 **Platforms:** TS 2068

Sequential/Random Access Files Support Package

LARKEN Electronics **Date:** 1988 **Price:** \$15.00 **Platforms:** TS 2068

RAM-based LKDOS extension adds support for sequential data file support to BASIC commands.

Lets you create, read from, or write to very large data files kept on disk. It uses the commands OPEN#, CLOSE#, PRINT#, INPUT#, and INKEY\$# to access the files from BASIC. There is also a high speed search command for finding a text string within the data file. Using the TAB command, you can randomly access directly any record in a file.

The utility is easily used within BASIC programs and has a lot of uses, from storing large data files, creating large spell checker dictionaries or even converting you BASIC programs to an ASCII text file.

Takes the limits off of the data capacity of the 2068.

A simple data base program is included on the disk to demonstrate the utility.

Software

SPDOS

RAMEX International **Platforms:** TS 2068

Disk operating system provided with the Millenia K interface.

RAMEX was the American distributor of SPDOS.

SPDOS for Oliger

Cuyahoga Valley Software Works
Date: 1988 **Price:** \$24.95 **Platforms:** TS 2068

SPDOS was marketed in the UK by Watford Electronics as a disk interface and operating system. Kempson later sold a version which used less RAM, approx. 700 bytes (Watford used about 8k). A variant of the SPDOS interface was marketed in North America by RAMEX International and known as the Millenia K.

This version was customized for Oliger hardware by Cuyahoga Valley Software Works.

Software

Educational

In the early 1980s, parents and teachers seemed enamored of the potential of computers as education tools. And, seemingly, they were willing to pay money to have that potential realized in their living rooms, dens and home offices.

One suspects this software in this category wasn't used as nearly as much as those parents and teachers had hoped. From the kid's point of view, it didn't matter: the computer was in the house.

1, 2, 3, Go

2-Bit Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Exercise skills in counting (Cats and Dragons), knowing left from right (Trace Course), and spelling (Scrambled Eggs; Alphabeasts). Can be played alone or with a friend.

16 1k Programs

Synchronizing Education and Games **Date:** 1983 **Price:** \$8.00 **Platforms:** ZX81, TS 1000

Game format, plus tips on using the TS 1000 in education. 1K.

16 Program Music Course

Crosscurrents **Date:** 1983 **Price:** \$169.00 **Platforms:** TS 1000

Complete theory workbook: note, key, chord & clef recognition and instrument drills. Two levels. Beginner through intermediate. 16K.

16K Fun Learning

A. Parsons **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Six programs. Word Sums: Invites you to add amounts shown in words, not figures. Areas: Gives the pupil exercises in working out areas and perimeters with guidance if required. Translation program for English and French words. An English vocabulary test. Two versions of the very popular Hangman. 16K.

1K Fun Learning

A. Parsons **Date:** 1983 **Price:** \$9.95 **Platforms:** ZX81

Learn spellings, add in hours and minutes, price quantities of groceries or give change. Plus four function sums with whole figure answers and score. Plus tables. 1K.

2K Edugram

Adventure Club **Date:** 1984 **Price:** \$6.00 **Platforms:** TS 1000

2K LOGO (learn basic LOGO), Math Raiders (answer big multiplication problems to shoot the ship), GPOT (geometric plotting of triangulation).

4 programs for pre-schoolers and special ed students

Screenmakers **Date:** 1982 **Price:** \$20.00 **Platforms:** TS 1000

Develop beginning reading skills. Large letters, rewarding graphics.

5 Educational Programs

TAG Software **Platforms:** TS 1000
Topics include geography, math, and science. Written in BASIC with documentation.

ABC Lift Off

Micromega **Price:** \$5.00 **Platforms:** TS 2068

Computer-based picture alphabet for young children, plus a game encouraging letter and word recognition.

Addition

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000

Drill for children. Listing. 1K.

Addition Primer

Mac-Man Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Similar to Numbers Primer except it adds the various combinations of 1 to 10 and graphically illustrates the quantities and their sums. 16K.

Aegean Voyage

Games to Learn By, Inc. **Date:** 1985 **Price:** \$15.95 **Platforms:** TS 2068

Helps develop deductive reasoning skills and introduces many characters and places of Greek mythology. Port of the Spinnaker educational program to the TS 2068. Ages 8 to adult.

Software

Algebra

Soft-Way **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
User enters up to 20 formulae; computer solves using input data. Includes “Electronic pac” - solves electronics calculations. 16K.

Algebra

American Micro Products, Inc **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000
A flash card style learning aid for helping the user learn and study high school level algebra. Specifically, the program deals with the solving of equations with one or two unknowns. 16K.

Algebra I

Timex Computer Corporation **Model:** 02-3003 **Author:** Home Computer Software **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Find the greatest common denominator, solve the roots of a quadratic equation and linear equations in up to 10 unknowns. 2K.

Algebra II

Timex Computer Corporation **Model:** 02-3004 **Author:** Home Computer Software **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Performs functions on matrices. Finds the number of combinations or permutations of a set. 2K.

Algebra Tutor

P & B Software **Price:** \$9.95 **Platforms:** TS 1000
16K.

Alphabet

Fisher-Marriott Software **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
Uses big size upper and lower-case graphics. Sections to learn where the letters are on the QWERTY keyboard; to match lower-case with upper-case; to teach alphabetic order. Age 4 up. 16K.

Alphabet Primer

Mac-Man Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
This program introduces the letter A to Z in large graphics. Screen prints letter A and awaits input of any key before proceeding. 16K.

Alphabet Soup

CRC Software **Date:** 1983 **Price:** \$12.94 **Platforms:** TS 1000
Learn to identify letter and numbers. 16K.

Alphabet Zoo

Games to Learn By, Inc. **Date:** 1985 **Price:** \$15.95 **Platforms:** TS 2068
Teach letter recognition skills via maze game. Port of the Spinnaker educational program to the TS 2068. Ages 3 to 8.

Angles

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
Provides practice, with some help, in use of protractor. 5-10th grade. 16K.

Animated Graphics Programming Course

Hensley & Associates **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Simple step-by-step secrets to creating your own “joystick” animated graphics type games.

Areas of Concern

TAG Software **Date:** 1983 **Price:** \$13.95 **Platforms:** TS 1000
Areas, perimeters, etc. 16K.

Arith-1.0

Systems and Solutions, Ltd. **Price:** \$5.00 **Platforms:** ZX81, TS 1000
Grades responses to generated list of addition and subtraction problems. 1K.

Arithmetic

American Micro Products, Inc **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000
A flash card style learning aid for pre-schoolers and elementary school children. Aids in learning the fundamentals of addition, subtraction, and multiplication. Over-sized numbers make this program especially easy to use. 16K.

Arithmetic and Geometric Progressions

Stephen Zachev **Date:** 1982 **Price:** \$2.00 **Platforms:** TS 1000
Computes the value and sum of a specified number of terms with a common difference or ratio, starting with the first user-defined term. 2K.

Arithmetic Baseball

ZOR KHAN Industries **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Educational program where children and adults compete evenly while learning. Questions range from simple counting to trig. Correct answers result in hits according to relative difficulty. 16K.

Arithmetic Tutor

P & B Software **Price:** \$9.95 **Platforms:** TS 1000
16K.

Astro Maths

Scisoft **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000, TS 2000, TS 2068
Defend your ship by answering problems. 16K.

Atomic Configuration

Integrated Data Systems **Date:** 1983 **Price:** \$11.90 **Platforms:** TS 1000
Drill on nuclear and electronic configurations. 1-6 players, 16 up. 16K.

Software

Atoms

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
A game for 1-6 players involving drill for chemistry and physics courses on nuclear and electronic configurations. 10-12th grade. 16K.

Ator the ABC Gator

Timex Computer Corporation **Model:** 03-3006 **Authors:** Linda Kuever, Sandra Ostrand **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000
Teaches recognition and sequence of the alphabet. Combines instruction, music and video games. 16K.

Basic Instruction

UAS **Date:** 1983 **Price:** \$3.95 **Platforms:** TS 1000
Detailed program listing for Integer program to illustrate various advanced programming techniques. Improve your programming skills while writing a new game program to capture your imagination.

BASIC Keyword Demos

EZRA GROUP II **Date:** 1982 **Price:** \$0.50 **Platforms:** ZX81, TS 1000
1K.

Beat the System

Maxsoft **Date:** 1984 **Price:** \$6.00 **Platforms:** TS 1000, TS 2068
Check your skills against the computer’s random generator.

Beginners Basic Course

Sussex Software House **Price:** \$16.50 **Platforms:** TS 1000

Beginning Game Design

Timeworks, Inc. **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000
Game design of “Lunar Lander,” a challenging space game. Kit shows in detail what should go into a good game program; covers display, design, and animation. Based on 8 step procedure of a “top down” design approach: general concept, displays, flow chart, algorithms, writing the

Software

program, type in the program, debug the program, modify the program. 16K.

Bell Curve Generator
EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
Generates a normal frequency curve. Listing. 1K.

BEST Computer Coach
Boston Electronic Systems Training **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Audio instruction tapes and computer program tape package. Presents audio-visual show for teaching the meaning and relationship of commonly used computer terms.

Bible Books
Marydel Frohne **Date:** 1984 **Price:** \$5.00 **Platforms:** TS 1000
Drill and practice in recognizing New and Old Testament books.

Bible Quiz Games
Praise Data Systems **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Series of games to test your knowledge of Bible Scripture. Interesting and educational fun for the whole family. Keeps score for you so that you can see your progress as you play again. 16K.

Bible Quizzes
Williams Enterprises **Date:** 1983 **Price:** \$3.95 **Platforms:** TS 1000
Persons, places and events in the Bible, or each book from Genesis through Revelation. Most books have 50 questions.

Bigspell
Fisher-Marriott Software **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
Spelling practice based on word lists in “Classroom Index of Phonic Resources” by Herbert and Davies-Jones. Incorporates 800 words divided into 115 tests. Each test covers a rule of spelling. Corrects mistakes. Age 5 to secondary level. 16K.

Biology 1
AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
Hangman format test game with 50 words/expressions; each with cryptic graphic or verbal clue. The test material is animal biology. 16K.

Biology 2
AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
Hangman format test game with 50 words/phrases/expressions; each with cryptic graphic or verbal clue. Test material is 10-12th grade plant and general biology. 16K.

Blam
Riverside Software **Date:** 1984 **Price:** \$18.00 **Platforms:** TS 2068
Touch typing instruction.

Bomber
Fisher-Marriott Software **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
Answer questions, then drop bombs on the answers as they come marching across the screen. 16K.

Books of the Bible: New Testament
Williams Enterprises **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000
Teaches correct order and location of Bible books.

Books of the Bible: Old Testament
Williams Enterprises **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000
Teaches correct order and location of Bible books.

Bumper Bundle
Hewson Consultants **Price:** \$8.00 **Platforms:** ZX80, MicroAce
14 programs on cassette for the ZX80/MicroAce including several with active displays.

Capitalization Master
Timex Computer Corporation **Model:** 06-3028 **Author:** Software For Excellence **Date:** 1984 **Price:** \$15.95 **Platforms:** TS 2068
Reinforces capitalization skills and prepares for achievement tests like the SATs. Teaches the most common capitalization rules and tests on what learning. Timed self-tests help strengthen test-taking skills.

Capitalization Master
Timex Computer Corporation **Model:** 03-3007 **Author:** Software For Excellence **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Teaches and reinforces correct capitalization rules for study or review. Menu driven. 16K.

Capitals and States
Robert J. Midura **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Test your knowledge of the capitals and states, Europe, Middle East, Asia. 3 modes: 1) Given the state, name the capital; 2) given the capital, name the state; 3) random mixture of 1) and 2). Review option gives all incorrectly answered questions. Each quiz consists of a random order of multiple choice questions with the answer randomly placed among 3 randomly selected choices. 16K.

Cassette 2: Junior Education
Sinclair Research Ltd. **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000
7 programs to help with addition, subtraction, multiplication, division, and spelling. Crash, Multiply, Train, Fractions, Addsub, Division, Spelling. 7-11 year olds. 16K.

Cassette 5: Junior Education
Sinclair Research Ltd. **Date:** 1983 **Price:** \$11.95 **Platforms:** ZX81
Math: 4 arithmetic functions at 3 levels of difficulty. Balance: See-saw theory. Volumes: Cube is drawn with dimensions given. Averages: Mean and mode. Bases: Decimal to other bases. Temp: Find resul-

Software

tant temperature from mixing 2 barrels of water at different temperatures. 9-14 year olds. 1K.

Cassette M1
Software House, The **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000
Addition, subtraction, fundamental arithmetic, various skill levels. 16K.

Cassette M2
Software House, The **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000
Multiplication, division, teaches fundamentals, various skill levels. 16K.

Cayley’s Sextant
EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
Listing. 1K.

Chemical Symbols
Silicon Valley Software **Date:** 1983 **Price:** \$9.99 **Platforms:** TS 1000
Educational game to learn the chemical elements in the periodic table. Automatic score keeping. Junior high school level and above. 16K.

Class List
P. Nethercot & R. Rackstraw **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
Names of teaching group are held in an array. Enter the mark for each pupil and a mark order list is produced along with the deviation from the average for each pupil. 16K.

Compound
AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
A game for 1-6 players involving “paying for” qualitative analysis data to determine the target substances. 9-12th grade. 16K.

Compound Chemistry
Integrated Data Systems **Date:** 1983 **Price:** \$11.90 **Platforms:** TS 1000
Use qualitative analysis to identify substances. 1-6 players. 16K.

Software

Computer Coach

Timex Computer Corporation **Model:** 03-3021 **Author:** Boston Electronics System Training **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000

Teaches the fundamentals of a computer system, its hardware, software and peripherals. Self-instruction cassette allows you to learn at your own pace. 16K.

Computer Tutors: Alpha/Vowel Tutors

Softsync, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Two programs on one cassette which visually help children learn the alphabet and the use of long and short vowels while also introducing them to the world of computers. With the help of graphic displays, students learn to match letters to the correct words. Alpha Tutor (ages 4-8) and Vowel Tutor (ages 5-9). 16K.

Computer Tutors: Math Raiders 1000

Softsync, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Math Raiders combines valuable math tutorial exercises with the fun of arcade games. You are the captain of the USS Raider 1000 with four weapons: addition, subtraction, multiplication, and division. Right answers allow you to fire at the invaders who are trying to penetrate the atmosphere. Two levels of play; ages 6-10. 16K.

Computing Taster Course

Spencer Software **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000

40 page booklet in large letters, which has been used with a large number of 10-14 year olds. It includes 25 or so programs which allow the pupils to gain experience whilst holding their interest. 1K.

Control Taster Course

Spencer Software **Date:** 1983 **Price:** \$11.00 **Platforms:** ZX81, TS 1000

50 page booklet for simple control experiments on the ZX81. It includes details

of traffic lights, simple robot, bar code reader and music maker. The booklet includes some notes concerning the construction of the control box. 1K.

Conversational French

Timex Computer Corporation **Model:** 03-3015 **Author:** D. E. Hagen **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000

Teaches the basic useful words and phrases of the French language. Over 240 words and 50 phrases. 16K.

Conversational German

Timex Computer Corporation **Model:** 03-3014 **Author:** D.E. Hagen **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000

Teaches basic useful words and phrases of German. Over 240 words and 50 phrases available. 16K.

Conversational Spanish

Timex Computer Corporation **Model:** 03-3016 **Author:** D. E. Hagen **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000

Teaches the basic useful words of Spanish. Over 240 words and 50 phrases. 16K.

Coor

KMC Programs **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000

Three lessons in Cartesian co-ordinates. The first gives basic facts and illustrates with examples. The second introduces the concept of X and Y axes and point of origin using moving graphics. The third is a game which uses knowledge of coordinates obtained from previous lessons. 16K.

Count-Down

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000

Content free "skeleton" with instructions in REMs for teachers/parents to add their own material. Based on a rocket-launch game; allows you to set 10 question tests

(random non-repeated questions) at four levels from a 60 item pool. 16K.

Countries of the World

Hewson Consultants **Date:** 1983 **Price:** \$12.00 **Platforms:** ZX Spectrum

Displays a high resolution color map of the world. Names all the countries, shows the position of each country and names its capital. Displays the population, currency and main languages of each country, gives statistics on the largest and smallest country, highest and lowest populations, most and least densely populated.

Course in Hypercube Theory

EZRA GROUP II **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

Listing. 16K.

Darts

KMC Programs **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000

Provides a realistic game of darts which exercises your ability in number work. Game cannot proceed until you calculate correctly. Correct calculation is also necessary to win the game against the computer. 16K.

David and Goliath

Christian Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Bible story game, multiple choice, answers with graphics. 2K.

Decision Tables

UAS **Date:** 1983 **Price:** \$5.95 **Platforms:** TS 1000

Eliminates redundancy in your programs. The instructions for this program include a section on the way to convert from flow diagrams to decision tables and back. The program will help you to trim a 15 by 15 table resulting in considerable memory savings. 16K.

Software

Der Student

J. W. Collins **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000

Review elementary vocabulary and grammar of German. 18 lessons. High school through college. 16K.

Division Primer

Mac-Man Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Begins with definition and explanation of division followed by illustrated examples and test problems. 16K.

Division Quiz

Ako Tech **Date:** 1983 **Price:** \$2.00 **Platforms:** TS 1000

Up to 25 random division problems. Maximum 4 digit dividend; 3 digit divisor. Modification for changing skill.

Doobarry Domino the Counting Phenomeno

Timex Computer Corporation **Model:** 03-3023 **Authors:** Linda Kuever, Sandra Ostrand **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Graphics, music help pre-schoolers learn the numbers 1 to 10. 16K.

Easy Math

Simulusion **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 1000

Calculator format: type in equations, the computer does the rest. Produces columnar output. 16K.

Edu Pac

Simplex Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Math Drills: four programs with 4 to 5 levels and scoreboard. Computer Aided Instruction: general purpose educational program.

Edu-Pak-1

KOPAK Creations, Inc. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Teaches and quizzes the user on reading comprehension, vocabulary, spelling

Software

and grammar. Includes the games Super Number Guesser and Fortune Teller. 16K.

Education Pack 1

LINSAC **Date:** 1981 **Price:** \$10.00 **Platforms:** ZX80
Maths drill, dot recognition, musical notes, spelling quiz, day finder. 1K.

Education Pack 2

LINSAC **Date:** 1982 **Price:** \$10.00 **Platforms:** ZX80
Graph plotter, prime factors, number bases, bar charts, statistics. 1K.

Education Pack 3

LINSAC **Date:** 1981 **Price:** \$10.00 **Platforms:** ZX80
Quiz package with three sample data sets. 2K.

Educational Aids Program

Polymath **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Solve and check mathematical equations quickly and accurately. Solve quadratic, cubic equations, polynomials, factor numbers, solve for x and y, plus more. 16K.

Educational Quiz

Rose Cassettes **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000
For the entire family. 16K.

Eduventure I

Intercomputer, Inc. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Answer the questions encountered in each classroom until you make it outside for RECESS and the surprise that awaits you there. Grade level K-3. 16K.

Eduventure II

Intercomputer, Inc. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Each new situation requires either your ingenuity or knowledge (or both) to avoid being sent to the principal's office. Grade level 4-6. 16K.

Eduventure III

Intercomputer, Inc. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Solve complex puzzles to outwit your teacher and achieve the highest scores. Grade level 7-9. 16K.

Eduventure IV

Intercomputer, Inc. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
An agile mind and quick reflexes will get you through this maze of mysterious situations to your DIPLOMA. Grade level 10-12. 16K.

Electricity

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
Hangman format test game with 50 words/expressions; each with cryptic graphic or verbal clue. Test material is 10-12th grade electricity and magnetism. 16K.

Electronics Tutor

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
16K.

Elementary School Package

Edson Electronics **Date:** 1982 **Price:** \$24.95 **Platforms:** TS 1000
9 learning and 3 game programs covering arithmetic, spelling and counting. Grades 1-4. 2K.

English Literature 1

Sinclair Research Ltd. **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000
Quizzes about authors. 16K.

English Literature 2

Sinclair Research Ltd. **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000
Quizzes about poets and playwrights, modern authors. 16K.

Equational and/or Touchstone

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
How to construct equational and/or touchstone program lines. Listing. 1K.

Espanol

P & B Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
English-Spanish and Spanish-English bilingual dictionary. In addition to basic vocabulary, Espanol learns new words and phrases from the user and adds them to its own vocabulary. 16K.

Fishing for Numbers

Timex Computer Corporation **Model:** 06-3006 **Platforms:** TS 2068

Flash Spelling

Heath Computer Services **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Enter up to 50 words for your child to learn to spell. Determine how long the word is flashed.

Flashcard

International Publishing & Software Inc **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000
Memory aid and testing device. This program simulates a set of flashcards. You can put questions on side one of the flashcard and the answers on side two. Then give yourself, your children or your friends a random test or a non-repeating test. Set up math quizzes, trivia, games, memory tests, etc. You define what is places on each card. The program is menu driven. You can set up, edit, and save cards for later review.

Forces

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
Hangman format test game with 50 words/phrases/expressions; each with cryptic graphic or verbal clue. Test material is 10- 12th grade dynamics and statics. 16K.

Software

Forensic Chemistry

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
A detection game involving standard chemical qualitative tests. 9-12th grade. Program won an award in the 1982 Sinclair educational computing software competition. 16K.

Fortune

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
Fortune telling program gives graphic displays, including zodiac sky for input birth date and neat random text output. 16K.

Four 16K Programs

Powell Hargrave **Date:** 1983 **Price:** \$12.50 **Platforms:** TS 1000
Math Tutor: Five levels of tutoring in addition, subtraction, multiplication and division. Typing Skills: Sets you against the computer at your selection of typing speed. Birds swoop to attack. Intercept them with missiles. Astro Smasher: Dodge asteroids as you try to smash all the enemy ships. 16K.

French

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
A rocket-launch test game. Four levels of 10-question tests; questions coming at random. English-French and French-English vocabulary. For end of year study, repeated. 16K.

French Review

Integrated Data Systems **Date:** 1983 **Price:** \$11.90 **Platforms:** TS 1000
Tests verbs, nouns and adjectives in 10-question quiz format. Suitable to end of first year of study. 16K.

French Revisions

Rose Cassettes **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
For ages 14-17. 16K.

Software

French Tutor

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
16K.

French Tutorial

Timex Computer Corporation **Model:** 06-3009 **Platforms:** TS 2068
Not released.

French Vocab

Bug-Byte Software **Price:** \$19.00 **Platforms:** ZX80
Contains 200 French words with their translations. Reference and testing modes in both directions (French-English and English-French).

French Vocabulary

Steve Karash **Date:** 1981 **Price:** \$10.00 **Platforms:** ZX80, MicroAce
16K.

Fundamentals of Math

Timex Computer Corporation **Model:** 03-3018 **Author:** ATM **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
A progressive series of drill, practice and review sessions. Graded. 80% score promotes the student to the next level. Up to 8 levels. For grades 1through 8. 16K.

General Knowledge

A. Parsons **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
A variety of general knowledge tests: Famous People Quiz, Name the Person, and Where About? Also Dates: Choose the correct date of a historical event. Plus Plurals: Spell correctly the plural of the word printed on the screen. 16K.

Geography

A. Parsons **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Seven programs: The student has to find towns in the UK or Europe with a series of five maps drawn on the screen. The maps are of Europe, UK, Southern England, South East England and South West England. There is a Town and Country

naming program and an English Towns Hangman. 16K.

Geography 1

Sinclair Research Ltd. **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000
Quizzes about towns and locations in Europe. 16K.

Geography Explorer: USA

Instant Software **Price:** \$19.95 **Platforms:** TS 1000
Educational program of U.S. geography. Three lesson sets includes: state’s capital, location, area in square miles, population and other information. There are lesson-planning suggestions and study aids. Makes learning interesting to children with animated graphic rewards. 32K.

Geometry

Soft-Way **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Menu of 21 shapes. Prompts for data, displays areas, volumes, perimeters and circumferences for 2- and 3-dimensional figures. 16K.

Geometry I

Timex Computer Corporation **Model:** 02-3002 **Author:** Home Computer Software **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Find the area of a polygon. Solve the unknown given 3 parts of a triangle. Convert radians to degrees and back. 2K.

German Tutor

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
16K.

Grade Book

SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Track up to 50 students with up to 30 grades per student. Unlimited classes, weight grades in any way, using your own formulae. 16K.

Grade Master

Mallas Software **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000
Computes grade average, median, totals of each grade, range of scores, class average, review individual or all students scores. 16K.

Grade Roster

Silicon Valley North **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
Complete permanent grade-book exam and course performance analyzer. Scores displayed in table with analysis of mean, standard deviation, variance, high /low score, frequency distribution for each activity. Final or part term student rankings based on weighted exam scores. 16K.

Graph

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
Plots any input x/y relation over wide ranges of values (user defined). Menu driven with printer option. 6-12th grade. 16K.

Graph I & Graph II

Robotec, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Indispensable for anyone working with algebra, trigonometry, analytic geometry and calculus. Turn your computer in to graphing tool. Enter an equation and the computer calculates points and plots the curve in the Cartesian Coordinate system.

Graph I plots one curve in four quadrants. Graph II plots two curves simultaneously.

Graphic Trig

Soft-Way **Date:** 1983 **Price:** \$5.95 **Platforms:** TS 1000
Plots data, scales display and does rectangular to polar conversion. 16K.

Software

Graphing

Italian Connection, The **Date:** 1981 **Price:** \$4.95 **Platforms:** ZX81, TS 1000
1K.

Guitar for Beginners

Timex Computer Corporation **Model:** 06-3007 **Author:** Tim Rossetti **Date:** 1983 **Platforms:** TS 2068
Not released. Covers the fundamentals of the guitar such as string and finger positions. This software is ideal for the beginner who wants to learn to play the guitar as well as the advanced student who needs additional practice to improve his or her techniques.

Guitar for Beginners

Timex Computer Corporation **Model:** 03-3009 **Author:** Tim Rossetti **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Covers the fundamentals of the guitar such as string and finger positions. Ideal for the beginner who wants to learn to play the guitar as well as the advanced student who needs additional practice to improve his or her techniques. 16K.

Hangman

Software Development Associates **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
An educational lesson to help you improve your spelling ability. The lesson randomly selects one of fifty vocabulary words. These are the same words used by Word Quiz Vol. 1. You are required to guess the word letter by letter. After each mistake another piece is added to the hanging man. After 13 mistakes, the body is complete, and you lose. Three volumes. 16K.

Hangperson

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
Content for “skeleton” with instructions in REMs for teachers to add their own material. Highly polished hangman format will

Software

set 50 words/phrases with graphic or verbal clues.

Hebrew Tutor

DRRP Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Learn Hebrew alphabet, vocabulary and pronunciation. Game format, 60 words. One to 10 players. 16K.

Help

KMC Programs **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000
Test pupils' knowledge of times tables in multiplication and division. Illustrates concept of multiplication as the addition of groups and the concept of division as the subtraction of groups. 16K.

Hex/Dec Conversion

Italian Connection, The **Date:** 1981 **Price:** \$4.95 **Platforms:** ZX81, TS 1000
1K.

Hi Precision Division

Italian Connection, The **Date:** 1981 **Price:** \$4.95 **Platforms:** ZX81, TS 1000
1K.

High Level Math

Run-It Software Club **Date:** 1982 **Price:** \$10.95 **Platforms:** TS 1000
Learn advanced math principles including: geometric function, circular and hyperbolic trigonometric functions, half and full incremental integration, differential equations. 16K.

Highschool French

Integrated Data Systems **Date:** 1983 **Price:** \$11.90 **Platforms:** TS 1000
Teach and test verbs, pronouns, adjectives. Vocabulary of words and common expressions. 16K.

History 1

Sinclair Research Ltd. **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000
Quizzes about events in British history and monarchs. 16K.

Hodthorpe Collection

Spencer Software **Date:** 1983 **Price:** \$21.00 **Platforms:** TS 1000
A collection of six general purpose programs for educational use covering arithmetic, spelling, picture quiz, multiple choice quiz and so on. The problems are chosen by the teacher and the computer monitors the responses for up to 20 pupils. Includes a 60 page booklet with examples, instructions, and listings. 16K.

Home Educator

American Micro Products, Inc **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000
A flash card style program that allows the user to design and write up to eighty flash cards for one package and then save them. This program comes with the states and their capitals entered as a beginning set of flash cards.

Human 1

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
A highly-polished hangman format test game with 50 words/expressions; each with cryptic graphic or verbal clue. Test material is 8-10th grade respiration, skeleton reproduction (human biology). 16K.

Human 2

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
Hangman format test game with 50 words/expressions; each with cryptic graphic or verbal clue. The test material is 8-10th grade excretion, digestion, health (human biology). 16K.

Inside/Outside Earth

Timex Computer Corporation **Model:** 06-3014 **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 2068

Software

Intermediate Maths 1

Rose Cassettes **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
For ages 8-13. Six programs, each with jackpot game plus certificate. 16K.

Intermediate Maths 2

Rose Cassettes **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
For ages 8-13. Six programs, each with jackpot game plus certificate. 16K.

Introduction to Chemistry

Timex Computer Corporation **Model:** 03-3020 **Author:** J. J. Hollandsworth **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Three part self-paced course in the basics of chemistry. First two programs include lessons, review of key terms, and self tests. The third program supplements the first two with a dictionary and a review of 103 elements. 16K.

Inventions 1

Sinclair Research Ltd. **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000
Quizzes about inventions before and after 1850. 16K.

Italian Tutor

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
16K.

Jogmath

ZX-Panding, Ltd. **Date:** 1983 **Price:** \$12.75 **Platforms:** TS 1000
Basic math skills. Simulated race against the computer or another person. Selectable number range and time allowed for answers. Joggers answer questions to complete the race. K-7. 16K.

Jungle Maths

Scisoft **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000, TS 2000, TS 2068
Cross the jungle by answering math questions. 16K.

Integer

UAS **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
A number game. Ten levels of complexity; play against the computer or others; try to outsmart the computer; great aid for learning arithmetic as well. 16K.

Integral Physics

Integrated Data Systems **Date:** 1983 **Price:** \$11.90 **Platforms:** TS 1000
Quizzes on integral physics. 3 skill levels; ages 16-18. 16K.

Intermediate Data Handling

Timeworks, Inc. **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000
Design a fundamental data base that can be used for anything from a mailing list to a date reminder. Uses the "top down" design approach; covers information entry and retrieval, tape storage, string arrays, and sorting techniques. 16K.

Intermediate English 1

Rose Cassettes **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000
For ages 8-13. Six programs, each with jackpot game plus certificate. 16K.

Intermediate English 2

Rose Cassettes **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
For ages 8-13. Six programs, each with jackpot game plus certificate. 16K.

Intermediate Game Design

Timeworks, Inc. **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000
Game design of "Slot Machine," a game of skill and chance. Kit shows in detail how to design a more sophisticated game. This is not, however, a typical slot machine program. A few surprises are thrown in. Uses the "top down" design approach; covers use of arrays, FOR- NEXT loops, subroutines, and how to make RND work for you. 16K.

Software

Junior Maths

Bug-Byte Software **Price:** \$17.00 **Platforms:** ZX80

Tables, division, addition and subtraction, or a mixture may be tested in this self-contained, easy to use program. Variety of question types, age-dependent timing, scoring, etc. 5-12 years.

Kid Grams

Timex Computer Corporation **Model:** 06-3003 **Platforms:** TS 2068

Not released.

Language Usage

Timex Computer Corporation **Model:** 06-3025 **Author:** Software For Excellence **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068

Improve scores on standardized achievement tests. Stores records on work done, helps identify troublesome areas.

Language Usage

Timex Computer Corporation **Model:** 03-3010 **Author:** Software For Excellence **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

For grades four through 12. Designed to help improve scores on standardized achievement tests. Records on work done, helps identify troublesome areas. 16K.

Learning About Ourselves

Paul Shreeve Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

16-page book containing listings of five programs for elementary/junior high science. Bar graph program, reaction test, alphabet memory test, numeric memory test, averaging numbers. Each with a full description and follow-up ideas. 16K.

LINGO 1

Mornae Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Programs to teach foreign languages (French, German, Italian, Japanese, Portuguese and Spanish). 16K.

Logic Levels

Games to Learn By, Inc. **Date:** 1985 **Price:** \$15.95 **Platforms:** TS 2068

Learn to predict the outcome of a series of actions via maze game. Port of the Fisher Price/Spinnaker educational program to the TS 2068. Ages 7 to 12.

Long Division

EZRA GROUP II **Date:** 1983 **Price:** \$1.80 **Platforms:** ZX81, TS 1000

Over 475 decimal places. Listing. 1K.

Long Division Tutorial

TAG Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Dedicated tutorial. 16K.

Machine Code Master

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

16K.

Machine Code Tutor

Knighted Computers **Date:** 1985 **Price:** \$18.50 **Platforms:** TS 2068

33 lessons on two cassettes. Instructions include examples and exercises to learn machine code. Includes a simulated assembler. Converted from Spectrum.

Make Math

EZRA GROUP II **Date:** 1983 **Price:** \$2.90 **Platforms:** ZX81, TS 1000

Learn mathematical concepts by application of patterns and rules. Analogy with repeating decimals. Listing. 1K.

Making Change

Games to Learn By, Inc. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 2068

Takes younger children through the composite and comparative values of various types of currency.

Mark Sorter

P. Nethercot & R. Rackstraw **Date:** 1983 **Price:** \$2.00 **Platforms:** ZX81

Sorts marks into descending order, along with pupil's initials. Much quicker and more reliable than shuffling bits of paper. 1K.

Mark Total with Averages

P. Nethercot & R. Rackstraw **Date:** 1983 **Price:** \$2.00 **Platforms:** ZX81

Overcomes the task of working out average marks when children have been absent. Adds up marks, and where short calculates and includes an average to render the totals comparable. 1K.

Massive.One

InfoCenter **Date:** 1983 **Platforms:** TS 1000

More than 40,000 bytes of interactive instructional material plus 5 fast-action, machine code games (many variations) each of which demonstrates one or more points regarding mass, inertia, momentum. Ages: 14 and up.

Master Math

PM International **Price:** \$9.95 **Platforms:** TS 1000

Math (+-x/)

Italian Connection, The **Date:** 1981 **Price:** \$4.95 **Platforms:** ZX81, TS 1000

1K.

Math by Numbers

Charles J. Bonner **Date:** 1984 **Price:** \$12.95 **Platforms:** TS 1000

Arithmetic tutorial for grades 3-5. Randomly generated problems in addition, subtraction, multiplication and division.

Math Facts Lab

Arizoftx **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Drill program for addition, multiplication, subtraction, division. Program grades responses, displays answers. Guide included. For grades 1-6. 16 or 64K.

Software

Math Master

Maxsoft **Date:** 1984 **Price:** \$6.00 **Platforms:** TS 1000, TS 2068

Add, subtract, multiply, divide with three levels of play.

Math Pack 1

Imre Auersbacher **Date:** 1985 **Price:** \$14.95 **Platforms:** TS 1000, TS 2068

Math Pack 2

Imre Auersbacher **Date:** 1985 **Price:** \$14.95 **Platforms:** TS 1000, TS 2068

Math Quiz

Heath Computer Services **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

Up to 50 problems in addition, subtraction, multiplication or division, with 6 difficulty levels. 16K.

Math Quiz

Skelly Computing **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000

Quiz yourself in addition, subtraction, multiplication, and division. Three levels of difficulty.

Math Quiz

Andy Balderson **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 1000

Asks questions on grade 1-6 level math.

Math Tutor

DSBC **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000

Takes a child from simple counting to multiplication and division. Good for preschool through 4th grade. Kids love the game-like format.

Math Tutor

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

16K.

Math Tutor - Advanced

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

16K.

Software

Math Tutorial Package
CAI Instruments, Inc. **Price:** \$9.95 **Platforms:** TS 1000

Math Wizardry I
Timex Computer Corporation **Model:** 06-3016 **Author:** Calpac Computer Software **Date:** 1982 **Price:** \$15.95 **Platforms:** TS 2068
Teaches young children the processes involved in solving addition and subtraction problems. Moving displays lead the user through the step by step solution. Digits in answer entered from right to left. Converted from a ZX Spectrum title by SoftSync.

Math Wizardry II
Timex Computer Corporation **Model:** 06-3017 **Author:** Calpac Computer Software **Date:** 1982 **Price:** \$15.95 **Platforms:** TS 2068
Teaches young children the processes involved in solving multiplication and division problems. Moving displays lead the user through the step by step solution. Digits in answer entered from right to left. Converted from a ZX Spectrum title by Soft-Sync.

Mathematics 1
Sinclair Research Ltd. **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000
Quizzes about addition, subtraction, multiplication and division. 16K.

Mathfun
Peak **Date:** 1982 **Price:** \$20.00 **Platforms:** TS 1000
First grade math with creative graphics to help children learn and review while having fun. Five programs covering addition, subtraction, telling time and more. 2K.

Maths
A. Parsons **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
In response to requests from teachers, this tape has 3 competitive programs for Maths Practice, Plus Bridge Maths, 4 Function Practice, each right answer builds another strut of the bridge; if not completed in

15 tries it falls down. Plus volumes; plus Big Maths, large figures for group use. 16K.

Maths Revisions
Rose Cassettes **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
For ages 14-17. 16K.

Micro Math
PM International **Date:** 1984 **Platforms:** TS 1000
Part of the more extensive Master Math package. Micro Math is intended for use on the Sinclair ZX81, Timex 1000, Commodore PET, and VIC-20 in schools and colleges as a computer-assisted learning aid and at home as a self-tuition course.

A random number generator originates problems, and the student is prompted to answer.

If an incorrect answer is keyed in, the student is given a clue about the theory behind the problem, and is prompted to answer again. If an incorrect answer is again keyed in, the correct answer is displayed together with a complete explanation.

Mr. Math
T-Ware **Date:** 1985 **Price:** \$10.00 **Platforms:** TS 2068
Compiled graphic tutor (ages 5 and up).

MT-SOFT The Teacher
MT-Soft **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
List and learn. 16K.

Multiple Choice
Bug-Byte Software **Price:** \$17.00 **Platforms:** ZX80
Allows you to enter any set of up to 25 multiple choice questions and performs testing, marking and correcting.

Multiple Choice
Mindware, Inc. **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000
Set up virtually any kind of multiple choice test. You can write as many as 30

Software

is for music teachers, schools, community art centers. 16K.

MX-PAC
Robill Products **Price:** \$24.95 **Platforms:** TS 1000
Designed to help you grow from program user to program writer. Consists of 18 programs with complete listings and explanations. Programs range from simple to sophisticated and include Printout I, a multi-level support and self-teaching guide.

My Type
Daydesign **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000
Teaches touch typing. Features include key location, review, token command drills. Mistakes and WPM given at end of each lesson. 16K.

Number Tumblers
Games to Learn By, Inc. **Date:** 1985 **Price:** \$15.95 **Platforms:** TS 2068
Arcade game to sharpen basic math skills. Port of the Fisher Price/Spinnaker educational program to the TS 2068. Ages 8 to 12.

Numbers Primer
Mac-Man Software **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
Introduces digits 1 to 10 in large graphics. Second run through requires user to input to continue. Quantities are depicted graphically as well as by numerals. Last segment allows user to input any number at random and will print that number. 16K.

Numeric
Mindware, Inc. **Author:** R. Carey **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000
All purpose mathematical tool for solving equations and plotting graphs. Handles any formula you can enter from the keyboard; plots the graph of any formula; solves simultaneous equations; solves right angles; calculates arithmetic mean and standard deviation for a single list of numbers; calculates means and deviations for

different test questions each with 3, 4, or 5 possible answers. Questions are randomly posed. A correct answer on the first try earns 2 points; the second try earns 1 point. 16K.

Multiplication Primer
Mac-Man Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Program starts with an excellent and simple explanation of multiplication. It then proceeds with illustrated examples as in the above and test problems. 16K.

Multiplication Tables
Heath Computer Services **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Choose the multiplier for up to 50 problems. Each problem is listed, showing user's answer and correct answer. 16K.

Multiplication Tables
Mac-Man Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Aid to learning the "times tables." Provides for user to select the multiplier and then prints out the full table for 1 through 12. 16K.

Music 1
Sinclair Research Ltd. **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000
Quizzes about composers and musicians. 16K.

Music Educator I
Timex Computer Corporation **Model:** 03-3013 **Author:** Tim Rossetti **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Excellent starting point for learning the notes of the scale. Shows name and timing of notes with plenty of graphical output. A unique addition to formal training. 16K.

Music Theory Workbook
Nicholas Scarim **Date:** 1983 **Price:** \$495.00 **Platforms:** TS 1000
Complete music theory workbook on 16 cassettes. Includes: treble, bass, and alto clefs; scales, keys, chords, meters, rhythm; piano, guitar, recorder drills. This package

Software

two lists of numbers, plus coefficient of correlation between two lists. 16K.

Our Intriguing Solar System

Timex Computer Corporation **Model:** 06-3013 **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 2068

Permutations and Combinations

Stephen Zachev **Date:** 1982 **Price:** \$2.00 **Platforms:** TS 1000
Orders up to 33 items in one group. 2K.

Phrase Challenge

Fun-Tech Software **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000
16K.

Phys Problems

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
A rocket-launch test game. Four levels of 10-question tests; questions coming at random from a 60 item pool, but not repeated. Solve standard physics data problems using random integral figures. 9- 12th grade. 16K.

Physics Tutor

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
16K.

Power Pack 1

Timex Computer Corporation **Model:** 02-3001 **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Calculator, bar graph generator, banner and polynomial equation grapher. 2K.

Presidents

Timex Computer Corporation **Model:** 03-3003 **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Memorize the Presidents of the United States. Two options of review are available: Presidents are presented and you must provide the term(s) or terms are presented and you must provide the president. 16K.

Primary Arithmetic

Rose Cassettes **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000
For children under 8. 16K.

Primary Association

ZOR KHAN Industries **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Introduce your three-six year old to computers, while reinforcing school work. Provides drills for matching, association, and basic comprehension. 16K.

Primary Maths Package

Paul Shreeve Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Tables test, fractions game, area game, make simple math fun for elementary grade children. 16K.

Prodigal Son

Marydel Frohne **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000
Two programs. First presents story in frames for student interaction. Second reenacts decisions made by the younger son.

Program of Days

International Publishing & Software Inc **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000
A historical data bank. Organized to provide insight and information regarding historical events. You can access the program to find out what famous persons were born and what noteworthy event happened on your birthday. 16K.

Programming Course, Second edition

Bug-Byte Software **Price:** \$21.00 **Platforms:** ZX80
Course consists of a book and a cassette of programs.

Programming Kit 1

Timeworks, Inc. **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000
Practical “how-to” learning approach to BASIC programming. 16K.

Proverbs

DRRP Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Game that teaches the wisdom of Solomon through the Biblical Proverbs. Six degrees of difficulty; contains 60 proverbs; learn the proverbs as you discuss them with your opponents. 16K.

Punctuation Master

Timex Computer Corporation **Model:** 03-3005 **Author:** Software For Excellence **Date:** 1982 **Price:** \$10.95 **Platforms:** TS 1000
Teaches the basic rules of punctuation using periods, question marks and commas. Practice exercises with a timed test. 16K.

Quiz All

Integrated Data Systems **Date:** 1983 **Price:** \$11.90 **Platforms:** TS 1000
Timed quizzes of general knowledge, reasoning, English and mathematics. 16K.

Quiz Grader

Diana Rowland **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
Grades tests and quizzes in which all sections are equally weighted; basic but efficient. 1K.

Quiz, The

ORBYTE Software **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000
Math game for grades 1-4; will improve skills at all ages; virtually unlimited problems of addition, subtraction, multiplication with reinforcement graphics. 16K.

Rapid Read

Syber, Inc. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Tachistoscope method. Speed and comprehension developed. 16K.

Software

Reading Lab

Arizoftx **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Improve reading speed and understanding using the tachistoscope method. 16K.

Rising Sun

TAG Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Tour Japan. Learn facts, geography. 16K.

Russian Roulette

P. Nethercot & R. Rackstraw **Date:** 1983 **Price:** \$4.00 **Platforms:** TS 1000
At heart a random number generator. Popular with younger children as it gives them a chance to fall down when “shot.” Makes nice use of graphic characters. 16K.

School Fund

P. Nethercot & R. Rackstraw **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
Handles school fund accounts, fully menu driven, any number of accounts available, printer routine included. Keep track of who has what in your school fund. Allows for current and deposit accounts. 16K.

Scramble Bug

Maxsoft **Date:** 1984 **Price:** \$6.00 **Platforms:** TS 1000, TS 2068
Two players guess each other’s words after the computer scrambles them up.

Set Theory

Timex Computer Corporation **Model:** 06-3002 **Platforms:** TS 2068
Not released.

Seven Programs

2K Express **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
Mathtest: uses repetition, rewards, 3 levels of difficulty. Utilities: enter meter readings; compare past normals; updates averages. Makelist: scrolls text of 22 lines; change any line. Other programs: invoices, budget, monthly sales graph, averages graph. 2K.

Software

Shuttle Designer

JA Specialty Software **Date:** 1985 **Price:** \$27.00 **Platforms:** TS 2068
Educational program that goes through design and development of Space Shuttle Mission. Results are analyzed to determine the success or failure of the mission.

Signals and Morse Codes

Gladstone Electronics **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Learn and practice semaphore, blinker lights and Morse code (including sound). For each code you can see or hear the numbers and alphabet in order, or any number or letter you choose. You can also receive random letters or numbers and messages, and be tested on any of the codes. Use the messages and tests in the program or insert your own. 16K.

Similes

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
A rocket-launch test game. Four levels of 10-question tests; questions coming at random from a 60 item pool, but not repeated, “as ... as a so-and-so,” or “as such-and-such as ...” 5-9th grade. 16K.

SincBasic

Sourceware, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Tutorial on Sinclair BASIC. Three cassettes. 1K or 16K.

Sinclair Basic Master

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
16K.

Solar System File

International Publishing & Software Inc **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000
A data bank of information on the cosmos. Interesting facts. Inter-relationships of the planets, their moons, the sun, artificial satellites, and the constellations. Now you can have finger-tip computerized access to amazing facts about the universe. 16K.

Spaceflash

Memory Master **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Earn shots at an alien landing craft by successfully answering questions in various drills. 3 levels of drill in addition, subtraction, multiplication, division, and visual memory training. Complete scoring for drills and space game. The visual memory drill automatically increases in difficulty as the player gives correct responses. 16K.

Spanish Tutor

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
16K.

Spanish Tutorial

Timex Computer Corporation **Model:** 06-3008 **Platforms:** TS 2068
Not released.

Speed Reading

ORBYTE Software **Date:** 1983 **Platforms:** TS 1000

Speed Reading

Computer-Wear Software **Date:** 1983 **Platforms:** TS 1000
Designed by a (2,000 words per minute) speed reading record holder. Demonstrates concepts needed to improve your reading skills/speed. Actual mechanical techniques are synthesized to give you all the benefits once available only from expensive courses. 16K.

Speed Reading Course

CompuSoft Publishing **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Mechanical techniques are synthesized by computer. Demonstrates basic concepts needed to improve reading skills and speed. Four 16K programs.

Spell World

T-Ware **Date:** 1985 **Price:** \$10.00 **Platforms:** TS 2068
Spelling driller.

Speller Bee

Sourceware, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Teaches spelling and vocabulary skills. Adaptable to any subject matter.

Speller Quiz

Isthmus **Date:** 1984 **Price:** \$6.95 **Platforms:** TS 1000
Ideal program for children to enter their entire spelling lessons, lists, spells, and then tests each word and retests for 100% efficiency. Makes learning fun for 1 or 2 students.

Spelling Bee

Timex Computer Corporation **Model:** 03-3017 **Author:** Russell Klein **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Four spelling quiz programs for grades 1-12. 16K.

Spelling I

Timex Computer Corporation **Model:** 06-3010 **Author:** PSI **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068
Lively spelling bee challenges the younger set. Computer lists all misspelled words to help your children learn from their mistakes. Two levels of difficulty accommodate both the beginner and advanced student.

Spelling II

Timex Computer Corporation **Model:** 06-3011 **Author:** PSI **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068
Spelling bee for advanced students helps to improve skills or practice for tests. Quiz scores indicate whether more practice is needed. Two levels of difficulties introduce increasingly complex spelling words.

Spelling Primer

Mac-Man Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Teaches youngsters to spell. Prints a picture and then a large word naming the object or concept. It then prints the picture and asks for INPUT of the word by user, i.e. , SPELL. There are many moving pictures

Software

and this is a visually stimulating program designed to hold children’s attention. 16K.

Spelling Program

John Osborne **Date:** 1984 **Price:** \$1.50 **Platforms:** TS 1000
Drills user in self-entered words. Fully adjustable word lengths, number of words, length of time to study words.

Star Reader

Scisoft **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 2000, TS 2068
Improve reading skills via games.

Starter Software Package

Troiano Software Company **Date:** 1982 **Price:** \$4.00 **Platforms:** TS 1000
14 programs to introduce both the Sinclair and the language BASIC. The programs cover several different topics including education, games, and graphics. 2K.

Statehood Quiz

Software Development Associates **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Three quiz programs relating to all 50 states. Questions on capitals, birds, mottos and more. 16K.

States and Capitals

Timex Computer Corporation **Model:** 06-3001 **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068
Find out how well you know the states and capitals. Self-teaching tool. Draws map of the US, shows where each state is and locates capital cities. Names must be spelled correctly. The computer will ask you for the state, the capital or a combination.

States and Capitals

Kimtech **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Draws the United States and divides it into seven regions. It then asks which region is to be studied, draws that region’s states, and quizzes the user for the states names and their capitals. At the finish of each region, a scoring summary is given

Software

showing results for that region and for the total lesson. 16K

States and Capitals

Silicon Valley Software **Date:** 1983 **Price:** \$9.99 **Platforms:** TS 1000
Educational game to learn US states and capitals. Play and study options. Automatic score keeping. 16K.

States and Capitals

Timex Computer Corporation **Model:** 03-3001 **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000
Find out how well you know the states and capitals of the United States. Self-teaching tool and map of United States challenge your abilities to name all 50 states and capitals. 16K.

States and Capitals

Fun-Tech Software **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000
Learn the states, capitals, year of statehood, abbreviations, the 13 original colonies. US map. All 50 states highlighted. 8 modes: 7 quiz; 1 teaching. 16K.

States and Capitals (cart)

Timex Computer Corporation **Model:** 07-3001 **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068
Find out how well you know the states and capitals. Self-teaching tool. Draws map of the US, shows where each state is and locates capital cities. Names must be spelled correctly. The computer will ask you for the state, the capital or a combination.

States and Capitals (cart)

Timex Computer Corporation **Model:** 07-9002 **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000
Find out how well you know the states and capitals of the United States. Self-teaching tool and map of United States challenge your abilities to name all 50 states and capitals. 16K.

Statistics

Timex Computer Corporation **Model:** 06-3015 **Platforms:** TS 2068
Not released.

Subtraction

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
Drill for children. Listing. 1K.

Subtractive Primer

Mac-Man Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Follows the same format as the Addition Primer except that the function is subtraction. 16K.

Super Grader

Diana Rowland **Date:** 1983 **Price:** \$9.50 **Platforms:** TS 1000
Deluxe menu-driven test grader with many options and error corrections provisions to assure user that typed in data are correct. 16K.

Super Math

Timex Computer Corporation **Model:** 06-3012 **Author:** PSI **Date:** 1983 **Platforms:** TS 2068
Not released. Helps children improve important math skills. Tests their knowledge of basic math — addition, subtraction, multiplication and division. Scores all tests and provides right answers. Five levels helps them to progressively improve math skills.

Super Math

Timex Computer Corporation **Model:** 03-3000 **Author:** PSI **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Drills in addition, subtraction, multiplication, and division with 5 levels of difficulty. 16K.

Super Math (cart)

Timex Computer Corporation **Model:** 07-9001 **Author:** PSI **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Drills in addition, subtraction, multiplication, and division with 5 levels of difficulty. 16K.

Software

Tape (5) Math

Roman Software **Date:** 1982 **Price:** \$8.00 **Platforms:** ZX81, TS 1000
Drills for all ages. 8 programs. 1K.

Tape (9) Quiz

Roman Software **Date:** 1982 **Price:** \$8.00 **Platforms:** ZX81, TS 1000
Various quizzes for all ages. 1K.

Tarbon’s Revenge

Memory Master **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
An enhanced version of Spaceflash. Position your space ship to intercept the alien with one of your missiles. Select the number of ships that must be shot down to win and the number of ships Tarbon must land to conquer the earth. As your aim gets better, Tarbon makes it more difficult by sending down smaller ships. 16K.

Taster course - Teacher’s Notes

Spencer Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Notes and comments concerning the way in which the following were used with a variety of pupils.

- Computing Taster Course
- Control Taster Course
- Hodthorpe Collection

Teach Your Tot

W S M Entertainment **Date:** 1982 **Platforms:** ZX81, TS 1000
Parent-assisted program of learning to share with your child.

Teacher

Instant Software **Price:** \$14.95 **Platforms:** TS 1000
Create a computerized teaching system for any subject. A lesson of up to twenty questions with their answers can be stored. The teacher/parent will find it easy to make up the lesson and can change it as many times as wanted. Animated graphic rewards for the correct answer. 16K.

Superdoodles

Timex Computer Corporation **Model:** 03-3011 **Author:** A. L. Laity **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Drawing program with fast and slow “pen” to move the cursor. 16K.

SyncMath

SyncWare Co. **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
Math quizzes for three levels of difficulty. Game rewards double as keyboard trainers. 6-16 yrs. 16K.

T/S Tutor

Banta Software **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
Introduction to the functions of the TS 1000 keys in all four modes. 16K.

Tables

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
A rocket-launch test game. Four levels of 10-question tests; questions coming at random from a 60 item pool, but not repeated. 16K.

Tables

P. Nethercot & R. Rackstraw **Date:** 1983 **Price:** \$2.00 **Platforms:** ZX81
Generates tables, tests; does not repeat questions in any one test produced. More than 10 questions will require more than 1K RAM. For teacher’s use as answers are supplied also. 1-3K.

Tale Teller I

Computer-Wear Software **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068
Learning unit for reading and vocabulary based on Aesop’s Fables.

Tale Teller II

Computer-Wear Software **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068
Learning unit for reading and vocabulary based on Grimm’s Fairy Tales.

Software

Teacher

Solutions **Date:** 1983 **Price:** \$9.99
Platforms: TS 1000
The computer can quiz you on any list you enter. 16K.

Teacher’s Gradebook

Timex Computer Corporation **Model:** 03-3019 **Author:** Mark Fendrick **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Teacher’s class records. Alphabetize names, record exam, quiz and other scores. Statistical functions, curves. Teachers can enter makeup exams, assign grades for a performance factor, and monitor student performance throughout the year. You can make changes or modifications at any time. Computer will average test scores and provide a suggested report card grade. Output to screen or printer. 16K.

Teachers Gradebook

Markel Software **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000, TS 2068
Track 40 students, 40 exams, tests, quizzes, quarterlies averaged and weighted; track homework and performance factor and more. 32K version of the 16K program available from Timex. 16-64K.

Ten Commandments

Marydel Frohne **Date:** 1984 **Price:** \$5.00 **Platforms:** TS 1000
Drill and practice in completing key words in the Ten Commandments and in recognizing the sequence.

Ten Tables

P. Nethercot & R. Rackstraw **Date:** 1983 **Price:** \$2.00 **Platforms:** ZX81, TS 1000
Displays on the screen 10 multiplication questions. Press ENTER and the answers are displayed for pupils to assess their own results. 1K.

Test Grader

Diana Rowland **Date:** 1983 **Price:** \$2.00 **Platforms:** TS 1000
Similar to Quiz Grader but also handles differently weighted sections in a test. 2K.

Test Grader with Grade-System Option

Diana Rowland **Date:** 1983 **Price:** \$2.50 **Platforms:** TS 1000
Similar to Test Grader but user can change grade system without changing program listing. 2K.

Test Grader with Group Print-out

Diana Rowland **Date:** 1983 **Price:** \$2.50 **Platforms:** TS 1000
Similar to Test Grader but prints out results every 10 students then recycles for next group. 2K.

Thanks Mr. Newton

TAG Software **Date:** 1983 **Price:** \$13.95 **Platforms:** TS 1000
Laws of motion. Graphic demonstration. 16K.

The Ark

Christian Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Bible story game, multiple choice, answers with graphics. 2K.

The Bible

Automata Ltd **Price:** \$10.00 **Platforms:** ZX81, TS 1000
Genesis, Adam and Eve, Noah, Plagues, Exodus, Holy Moses, Sodom, Goliath, Jonah, Bethlehem. 1K.

The Chemistry Tutor

H. R. Brady **Date:** 1983 **Price:** \$16.00 **Platforms:** TS 1000
Helps you learn chemistry topics. Includes writing chemical formulas, naming compound formulas, mole-gram-molecule conversion problems, balancing chemical equations, stoichiometry problems, induing mass-mass, mass volume, and volume-volume relationships, Boyle’s law, Charles

law, combined gas law, and ideal gas equation problems 16K.

The Complete Teacher

Melvin MacKaron **Platforms:** TS 2068
Electronic grade-book for the 2068.

The Count

Fisher-Marriott Software **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
To help the youngest child, and those who have not yet grasped the concept of number. Presents the basic ideas of number and counting in a friendly and helpful fashion. 16K.

The Educator

Compuwiz Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Teaches you about programming your computer. All teaching is interactive and very easy to learn. 16K.

The Math Teacher

CompuTech & Software Industries, Inc. **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000
Educational math tutorial program. Drills basics of addition, subtraction, multiplication and division. First grade to junior high. 25 problems of user-selected operation. Score, graphics, and option to do another 25.

Tic Tac Toad

Sourceware, Inc. **Date:** 1984 **Price:** \$12.95 **Platforms:** TS 1000
Professor I. M. Toad interacts with players as the program educates, motivates and entertains. Combines strategy of tic tac toe with entertaining question and answer game.

Time Teacher I

Timex Computer Corporation **Model:** 06-3004 **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 2068
Assists in learning the components of time. Pre-teaching and random practice examples with positive reinforcement. Pre-school through 3rd grade.

Software

Time Teacher II

Timex Computer Corporation **Model:** 06-3005 **Platforms:** TS 2068
Not released.

Times Tables

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** TS 1000
Multiplication tables. Listing. 1K.

Total Triangles

Timex Computer Corporation **Model:** 03-3012 **Author:** Earl Powers **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Gives the surface area for any length. Gives weights for metal constructions. Encompasses the subject of triangulation. 16K.

Touch Type Game

JRC Software **Date:** 1983 **Price:** \$1.00 **Platforms:** TS 1000
Learn to touch type all the ZX/TS symbols in a fun, challenging manner. Recommended only for users with special keyboards or overlays. Takes about 10 hours to master. 2K.

Trig Teacher

Friendly Computer **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Learn the trigonometry functions available in Sinclair BASIC. Lots of graphics, pictures, examples. Covers SIN, COS, TAN, ACS, ATN, LN, EXP. Instruction sheet includes a list of formulas to use in you BASIC programs. 16K.

Trigonometry

American Micro Products, Inc **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000
Uses a flash card approach to supplement high school math classes and teach the user about calculations involving triangles and parallelograms with numerous graphical examples. 16K.

Software

Truth Value Programming
EZRA GROUP II **Date:** 1983 **Price:** \$1.95 **Platforms:** ZX81, TS 1000 1K.

TS Grader
Robert Fischer **Price:** \$19.95 **Platforms:** TS 1000, TS 2068
Handles multiple classes, weighted/un-weighted averages, bonus/demerit points, alphabetizing, Timex printer output. All data on ONE screen. 16k TS 1000 can track from 279 pupils with 5 grades each up to 64 pupils with 66 grades each. Easily converted to 64K with 7 times more capacity. TS 2068 has 5 times the capacity of 16K version.

Tuition
Rose Cassettes **Date:** 3/1/1981 **Price:** \$10.80 **Platforms:** ZX80
Make it fun to learn maths, English, general knowledge and reasoning. 13 and under.

Turning the Truth Tables
2-Bit Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
First in a series on the principles of programming. Have fun as you find out what “and,” “either,” “or,” “if,” and “then” mean to a computer. Some things may not be so logically impossible as you might think. Ages 12 and up. 2K.

Tutor
Dale Lipinski Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000, TS 2068
A quiz-making program to help others learn. You tailor the quiz to your student. You may enter text and questions or just questions in multiple choice, true-false or direct answer. Included is a subroutine to organize your inputs so they are readable when displayed. Self expanding to the available memory.

Tutor 1K
Wyncom **Date:** 3/1/1981 **Price:** \$7.00 **Platforms:** ZX80
Languages, history, mathematics: WYNCOM’s TUTOR program stores questions on any subject, presents them in random sequence. 1K version displays answer. Listing.

Tutor 2K
Wyncom **Price:** \$12.00 **Platforms:** ZX80
Stores questions on any subject, presents them in random sequence. Checks student’s response. Listing, 2K.

U Quiz U
Robert Martin **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000
Quizzes user on any information that user enters. Option of responding to either a question or an answer. Determines the user’s problem areas; periodically repeats those questions.

U.S. Presidents
Silicon Valley Software **Date:** 1983 **Price:** \$9.99 **Platforms:** TS 1000
Educational game to learn the U.S. Presidents. Important Presidential facts included. Automatic score keeping. Fun for all ages. 16K.

U.S.A.
Foote Software **Price:** \$9.95 **Platforms:** TS 1000, TS 2068
Presidents, states and capitals.

Understanding Sinclair Basic
A. +Associates **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Fully demonstrates all of the Sinclair BASIC commands and statements. You control the speed of the demonstration. Repeat each program as you need. If you are having difficulty with the manual, this program will simplify your problems. 16K.

Software

Word Quiz
Software Development Associates **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Two educational lessons to help you increase your vocabulary. Each lesson displays a word with two definitions. If you select the correct definition, you will receive 10 points. Each lesson consists of 25 words. Lesson 1 is a beginner’s lesson. Lesson 2 is an advanced lesson. Three volumes. 16K.

Word Test
Mindware, Inc. **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000
Computer poses in random order a series of up to 30 variations on a general test question, e.g., a question like, “What is the state capital of . . . ?” Checks the answers for accuracy and gives 2 points for each correct answer. 16K.

Word Twister & Vocabuilder
Chia-Chi Chao **Price:** \$10.00 **Platforms:** TS 1000, TS 1500, TS 2068
Vocabulary learning programs.

Wordplay 1
Fisher-Marriott Software **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
Pit your wits against the computer. Word-cross: Score points each time you can get words to cross on a grid. Anagrams: Sort out the jumbled letters. Hangman: Use the word lists in the program or input your own. Age 7 up. 16K.

Wordplay 2
Fisher-Marriott Software **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
Word games for 2-6 players. A trial of skill referred by the computer. Anagrams: Watch the computer jumble your word up, your opponent sorts it out. Hangman: Avoid a sticky end. ZXrabble: Not really Scrabble, but you get 7 letters and must make the longest word as fast as you can. Age 7 up. 16K.

Up & Add ’Em
Games to Learn By, Inc. **Date:** 1985 **Price:** \$15.95 **Platforms:** TS 2068
Teaches numbers to young children with animals. Port of the Spinnaker educational program to the TS 2068. Ages 3 to 7.

Vocab Builder
CSI Company **Date:** 1982 **Price:** \$9.50 **Platforms:** TS 1000
60 words per cassette, for teens and adults. 16K.

War Game
AVC Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Named after famous British anti-nuclear war film. Presents relevant facts of Hiroshima; offers relevant data pages; provides a simulation in which the user must explore the effects of nuclear explosions on London in a range of variable conditions. Detailed instructions, notes, and references. 16K.

Wiz Bang Math
CAI Instruments, Inc. **Price:** \$9.95 **Platforms:** TS 1000

Wizard Box
Scisoft **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000, TS 2000, TS 2068
Set a quiz, learn to spell, test foreign vocabulary and more. 16K.

Word Guesser
Fun-Tech Software **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000 16K.

Word Pool
Crown Computers **Date:** 1982 **Price:** \$15.00 **Platforms:** ZX80, ZX81
Ultimate spelling program for ZX80/81. For use in the home or school. Program features a current list and a “word pool” built up from previous lists. Uses a corrective routine with graphics. 4K ROM and 8K ROM versions. 16K.

Software

Words

ORBYTE Software **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

450 words in random sequence and scrambled differently each time. Solve scrambled words with 3 tries. Categories: people, things, animals, food, plants, time, numbers, geography, science, and technology. Solve scrambled words with 3 tries. After 10 words, score given. 16K.

Words to Know and Understand

Sourceware, Inc. **Date:** 1984 **Price:** \$12.95 **Platforms:** TS 1000

Exercises encourage proper word usage and spelling.

Writing

UAS **Date:** 1984 **Price:** \$8.95 **Platforms:** TS 1000

Enter 100 word sample of text and program will determine educational grade level required to understand it. 16K.

Z80 Tuition

Andover Software Kits **Date:** 1982 **Price:** \$49.00 **Platforms:** ZX81, TS 1000

8 part bi-weekly correspondence course in machine code programming. Includes details for adding RAM, EPROM, hex keypad, LCD display and PROM programmer. 1K.

Zetapak 2: Basically BASIC

ZETA Software **Date:** 1982 **Price:** \$9.95 **Platforms:** ZX81

RaNDom POKEr, RETURN Address, LOOPer, IF I May, InVARIABLEly, DisAR-RAYed, and PAUSE. 1K programs.

ZX Mathematics

Gladstone Electronics **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000

Help your first to sixth graders learn at home. Two program cassettes per package, each with 8 lessons and games. Workbook with exercises and games and explanation for parents. Each package covers a grade and complements standard text-

books used in North America. Allows student to proceed at his own speed and level. Programs are self-guiding. 16K.

ZX Typing Tutor

Micro-Tech **Date:** 1982 **Price:** \$4.95 **Platforms:** TS 1000

Learn typing; three skill levels.

Software



Engineering, Math and Science

This could almost be a subset of educational software but for the fact that many of these programs had serious applications in the engineering, math and science realms. A surprising amount of highly specialized engineering, math and science applications were released for the Sinclair computers.

10 Programs for the ZX81

Verlin K. Cross **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

Examples of input/output and instructions. 6 on statistics: student, paired observations, correlation, linear regression, analysis of variance, and chi squared. 4 on fish hatchery management: 2 on fish food order and daily feed programs (one for rainbow trout; one for cutthroat trout), fish hatchery records; flow and density index calculations.

3 Factor ANOVA with Interaction

Ako Tech **Date:** 1983 **Price:** \$2.50 **Platforms:** TS 1000

Evaluates ANOVA where a single subject is exposed to one level for each factor. Up to 5 levels of treatment per factor; up to 5 subjects per cell. 7 F-statistics are tested by an error term.

AC Circuit Analysis

Z-Tron International **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Frequency response, op-amps, NPN transistors, FETs, transmission lines, open/short stubs, RLC circuits. 16K.

Advanced Math

Foote Software **Price:** \$12.95 **Platforms:** TS 1000, TS 2068

Advanced Math

T-S Systems **Date:** 1983 **Price:** \$4.00 **Platforms:** TS 2000, TS 2068

Allows you to use a complex multiplication of more than 2 digits.

Aircraft Performance Program

Robert Fingerle **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

Charts climb rate vs airspeed to make performance comparisons of aircraft under varying conditions of weight, power, and altitude. Booklet with listing, explanation of all equations, and a tabulation of specifications for 250 production and home-built aircraft.

Algebra Solver

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Amplifier CAD

Softec **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000

Computer-aided design tool. Automatically calculate component and circuit values for amplifiers.

Antenna Design

Huron Communications **Date:** 1983 **Price:** \$9.50 **Platforms:** TS 1000

For FM, HAM, and TV antennas. Design your own or modify your current antenna to optimize the reception in your specific location.

Antenna Design

Kentronics **Date:** 1984 **Price:** \$5.95 **Platforms:** TS 1000

Design your own cubical quad, yagi beam or inverted Vee antenna for ham or CB radio.

Anypoint Plotter

ZX-Panding, Ltd. **Date:** 1982 **Price:** \$3.75 **Platforms:** ZX81, TS 1000

Crunches any data to allow the best possible graph by readjusting the vertical coordinate to each set of data. A data summary will then follow including lowest and highest data points, data sum, and data mean. 1K.

Areas

Stephen Zachev **Date:** 1984 **Price:** \$4.00 **Platforms:** TS 1000

Two programs to approximate the area under a curve to either the x or y axis using Simpson's rule and the trapezoidal rule. Plug in your equation along with two constraints. 2K.

Software

Arithmetic and Geometric Progressions

Stephen Zachev **Date:** 1982 **Price:** \$2.00 **Platforms:** TS 1000
Computes the value and sum of a specified number of terms with a common difference or ratio, starting with the first user-defined term. 2K.

Astro Map & Conversion

Pegasus Micro Systems **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000, TS 2000, TS 2068 16K.

Astro-Utilities

Robert C. Moler **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Calculates Julian date, sidereal time; rise/set times; altitude/azimuth; procession of celestial objects; and more. 16K.

Astronomer’s Guide

Sinclair Research Ltd. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Contains astromap, giving access to information on 800 stars and other celestial objects. 16K.

Astronomer’s Guide

Timex Computer Corporation **Model:** 03-3004 **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Unreleased Timex Computer Corporation version of the Sinclair Research tape of the same name.

Astronomy

Imre Auersbacher **Date:** 1985 **Price:** \$14.95 **Platforms:** TS 2068
Compute positions of the sun, moon and planets for any date. Find dates and times of moon phases, solar and lunar eclipses, sunrise/sunset times, equinoxes/solstices, Julian day and sidereal time.

Atan 2K

A.T&A Compu-U-Ware **Date:** 1983 **Price:** \$4.96 **Platforms:** TS 1000

Audio Frequency Counter

Ron LeMon **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Large display. 2K.

Autotrack: Computer Rotor Control

Spectrum West **Date:** 1983 **Price:** \$159.95 **Platforms:** TS 1000
Antenna rotor controller. WorldTrack software on cassette. Advertised in AMSAT Journal.

Balance

Frank Lockhart **Price:** \$9.95 **Platforms:** TS 1000, TS 2068, QL
Calculates point of balance, beam lengths, weights, etc.

Beam Design

Banta Software **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Calculates shear force and moment diagrams for statistically determinant beams with concentrated and uniform loads. Finds normal and shear stresses for given section or section modulus for a given section. 16K.

Beam Heading

Kentronics **Date:** 1984 **Price:** \$5.95 **Platforms:** TS 1000
Calculate bearing, miles and kilometers from user’s city to any location in the world. Prints world grid centered on user’s city.

Belt and Chain Drives

Frank Lockhart **Price:** \$9.95 **Platforms:** TS 1000, TS 2068, QL
Gives 9 important answers fast. Finds tangents, angles, pitch lengths, arc of contact, ratios, etc.

Calculus Solver

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Celestial Locator

Z-West **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
Provides the amateur astronomer with AZ/ALT positions for any given celestial source. Radio astronomers can rapidly adjust antennas with the location positions provided by this program. Can print monthly positions on RS232 printers via ZX99. 16K.

CHIP

Zunk Custom Electronics **Date:** 1988 **Price:** \$12.50 **Platforms:** TS 2068
Integrated circuit inventory program. Hold up to 300 entries with descriptions and quantities. Fast search and sort routines. 64 column file displays.

Chord/Curve

Frank Lockhart **Price:** \$9.95 **Platforms:** TS 1000, TS 2068, QL
Finds radius, angle, arc and chord lengths, sector and segment areas. Gives angle in degrees and radians.

Circuit Analysis

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Common-Emitter Transistor Amplifier

SyncWare Co. **Date:** 1983 **Price:** \$20.00 **Platforms:** TS 1000
Design and analysis of common-emitter transistor amplifiers. Biasing, stability, frequency response, input/output resistances, power dissipation, and thermal effects taken into account. Prints schematic and Hybrid-Pi equivalent circuit, stores up to five different transistor spec sheets. 16K.

COMPU-STAT

Computercraft **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
General statistics program. Calculates most descriptive statistics, graphs frequency distribution. Manual gives step-by-step explanations. 16K.

Software

Computer Navigation

Celestial Software **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Seven programs for computer navigation. Great circle sailing. rhumb-line sailing, dead reckoning, latitude by noon sight, longitude by time sight, star and planet identification, and sight reduction. 16K.

Constellation

Bug-Byte Software **Price:** \$14.95 **Platforms:** TS 1000
Turn your ZX81 into a telescope. Produces a simulation of the night sky as seen from any position on Earth at any chosen time this century. You may point your telescope in any direction, move it up, down, left or right, zoom in or out. Stars may be displayed by magnitude or constellation. 16K.

Conversions/Functions

Frank Lockhart **Price:** \$9.95 **Platforms:** TS 2068, QL
Converts decimal degrees to degrees-minutes-seconds plus radians, grads. Gives six trigonometry functions for each input. Answers in one second.

Cryptographics Programs

Crypt **Date:** 1984 **Platforms:** TS 1000
Five 2K programs for secure communications. Illustrates degrees of message security, including unbreakable random codes.

Cubic/quadratic Solution

Igor Alexeff **Date:** 1984 **Price:** \$1.00 **Platforms:** TS 1000
Solution to the cubic and quadratic equation for real coefficients.

Differential Equation Solver

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Software

Distacalc

RCO Technical **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Calculates great circle distance and heading from entered latitude and longitude data. File of 250 world cities is updated each time calculation is made on new point. Results given in statute miles, nautical miles, and kilometers. Ideal for radio amateurs and navigators. 16K.

Drugs and Bugs

William D. Loeser, MD **Date:** 1984 **Price:** \$39.00 **Platforms:** TS 1000
Antibiotic selection program for physicians. 16K.

Dual Trace ‘Scope’

Computer Continuum **Date:** 1983 **Price:** \$35.00 **Platforms:** TS 1000
155,000 samples per second with trigger and cursor.

E.E.

Spectra Computer Products **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000
Electronics Engineering software for engineers, technicians, students, hobbyists who wish to learn to use these formulas. Includes Ohm’s law and its ramifications. 16K.

E.E. 1 Filter Design

American Micro Products, Inc **Model:** 03-3008 **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Aid for electronic engineers and students in the field of designing filters. Provides information on bandpass, low-pass, or high-pass filters using a menu-driven approach. Plots of all your design criteria are available. 16K.

Electronic Circuit Design Programs

R. T. Darin Enterprises **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000
Programs for computer-aided-design of active filters (Bessel, Butterworth, Chebyshev). Also design pads and attenuators; state-variable, stagger-tuned, and notch fil-

ters; amplifiers, 555 timers, yagi antennas; regulators; and heat sink parameters. Many draw schematic on screen. 16K.

Electronic Programs for the Hobbyist

Bob Wells **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 1000
Programs cover Ohms law, op-amps, bipolar power supply design.

Electronics

JPR Software, Inc. **Date:** 1983 **Platforms:** TS 1000
Use your computer in your electronics work. Ohm’s law and power dissipation, resistor/capacitor network calculations, astable/monostable 555 timer circuit, transistor amplifiers, power supplies, and other time consuming calculations.

Electronics Engineer

Steve Dinstbier **Date:** 1983 **Price:** \$4.00 **Platforms:** TS 1000
Menu driven program for the electronics hobbyist or engineer. Covers voltage division, LED voltage dropping, resistor color codes, and Ohm’s Law.

Electronics Subroutines, Combo II

JPR Software, Inc. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Capacitive time constants; current power dissipation inductance; Ohms Law; Joules Law; parallel; series resistance; parallel; series capacitance; etc.

ELF/1

Support Systems One **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
Electrical/Electronic Formula Program One. With any two of the following: ampere, voltage, or wattage, the third unit of measurement can be found. 16K.

Ephemeris V

Ephemeris V **Date:** 1982 **Price:** \$8.00 **Platforms:** TS 1000
Planet finder. Enter date, time, latitude and longitude. Program will calculate azimuth and altitude, right ascension and declination. Provides graphic display of planet in current constellation and local sidereal time to aid in finding stars, comets, nebulae, etc. 16K.

Equation Solver

Robert Martin **Date:** 1984 **Price:** \$8.95 **Platforms:** TS 1000
Displays each step in the solution of mathematical equations. Works on any level of mathematical proficiency. Also solves unknowns.

EZ-Filter

Electro Research **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Op-amp filter design. 16K.

Fast Fourier Transform

Z-Tron International **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
16K.

Frame, Truss and Grid

Okoloko Engineering Software **Platforms:** TS 2068
Engineering software for frame, truss and grid analyses. Intended for consulting engineers, civil/structural engineers, mechanical engineers and engineering students.

Functional Analysis

UAS **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000
Given any function defined in a closed form, the program finds its maximums, minimums, and zeros over a given range of the argument. The function, its derivative, or its integral may be evaluated at a point and tabulated over a range. 16K.

Software

Galaxy

Robert C. Moler **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Draws normal and barred spiral galaxies from input parameters. Galaxies may have variable orientation from face-on to edge-on. Choice of two spiral algorithms. 16K.

Graphic Calculator

ZxCo **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
Turn your computer into a full graphics calculator able to display equation with result. 1K.

Ham Radio Pak

ZETA Software **Date:** 1983 **Price:** \$24.45 **Platforms:** TS 1000
Special package which includes: POLSAT: calculates minute-by-minute aim-angles for polar orbiting comsats. GEOSAT: calculates the aim-angle to any of the geostationary comsats. DISH: calculates the plotting points for custom radio dishes.

HAM-AID

Active Designs **Date:** 1982 **Price:** \$8.00 **Platforms:** TS 1000
Calculate reactance. resonance. resistors in parallel. and evaluate expressions. 2K.

Hamilton Display

EZRA GROUP II **Date:** 1983 **Price:** \$1.90 **Platforms:** TS 1000
Generates and displays Hamilton paths on a forgetful functional representation of a 4-dimensional cube. 16K.

Hamilton Path Generator

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** TS 1000
Generates paths along edges through each corner once on hypercubes. Listing, 2K.

Software

Hamware

Z-Games **Date:** 1983 **Price:** \$2.00
Platforms: TS 1000
5 programs for ham radio operators. Covering circuit design ac and dc, impedance, frequency, and antenna design. 1K.

Heating and Air Conditioning Simulation

Michael R. Busman **Date:** 1984 **Price:** \$50.00 **Platforms:** TS 1000
Analyzes large buildings. Calculates annual heating and cooling consumption based on hourly weather, design, schedule inputs; lighting, fans, pumps; multiple zone buildings; what-if situations. Requires 32K RAM.

Hyperbolic Spiral

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
Listing. 1K.

Hypercycloids

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
Listing. 1K.

Intermediate Math Pack

Imre Auersbacher **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 1000, TS 2068
Compute primes, GCD, LCM. any base conversion, roots of functions, triangle solutions, linear regression, simultaneous equations, determinants, vector operations. 2K.

Ionisation

AVC Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
Plots ionization energies for input groups/periods as required for chemistry courses. Important patterns are shown graphically. 10-12th grade. 16K.

Lab Assistant

Run-It Software Club **Date:** 1982 **Price:** \$16.95 **Platforms:** TS 1000
Scientific reference and teaching program. Includes curve fitting of peaks and valleys, periodic table with atomic weights and numbers plus orbitals and more, molar-

ity/normality, PPM/weight converter, metric converter. 16K.

Lab Program I

Labsoft **Date:** 1984 **Price:** \$24.95 **Platforms:** TS 1000
Computes CODs, BODs, MLSS/M-LVSS/SVI, total suspended solids, total solids. Will run 20 samples in each category.

Lab Program II

Labsoft **Date:** 1984 **Price:** \$24.95 **Platforms:** TS 1000
Two interactive parts: COD and BOD/COD correlation. Will compute COD, estimated BOD, sample sizes for BOD analysis, expected high and low BOD range.

LCM & HCF, Prime factors, Statistics, Bar-chart plotter

Artic Computing **Model:** E1.01 **Price:** \$9.50 **Platforms:** ZX80
Math programs for the 1K ZX80.

Lemniscate of Bernoulli

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
Listing. 1K.

Levers

Frank Lockhart **Price:** \$9.95 **Platforms:** TS 2068, QL
Solves for three most common types for forces, fulcrum point, lever length and more.

Limacons

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
Listing. 1K.

Linear Programming

EZRA GROUP II **Date:** 1982 **Platforms:** ZX81, TS 1000
1K.

Linear Regression

EZRA GROUP II **Date:** 1982 **Price:** \$2.00 **Platforms:** ZX81, TS 1000
1K.

Software

Math and Electronics

Soft-Way **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
6 programs. Resonate Circuits: Series and parallel calculations. Geometry: Areas, volumes, perimeters of 22 shapes. Graphic Trig: Plots X-Y data, prints angles and hypotenuses. Ohm's Law (DC): Voltage, amperage, resistance, and power. PI and T Networks: Impedance matching and attenuators. Temperature conversion: Fahrenheit and Celsius. 16K.

Math Pak

ZETA Software **Date:** 1982 **Platforms:** TS 1000
Math routines and fit, variance analyzer, statistics and RPN calculator. 16K.

Math Routines and FIT

ZETA Software **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000
General purpose mathematics program for calculating factorials, permutations, and combinations, for solving quadratic and cubic interpolations, and for plotting fitted curves of 4 different functions. 16K.

Mathematics of Higher Order, Combo IV

JPR Software, Inc. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Arithmetic progression; area of common figures; complex variables and operations: exponents; derivatives; logarithms; factorials; etc.

Mathstat Pac

Simplex Software **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Four programs. Statistics: computes mean, variance and standard deviation. Linear Regression: computes regression coefficients and displays equation. Vector Math: adds two vectors and provides resultant vector. Simultaneous Equation Solver: solves system of simultaneous equations.

Linearsystems3.0

Arizoftx **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Solves set of linear system equations of up to twenty real, or ten complex-valued unknowns. Uses Gaussian elimination with partial pivoting to minimize effects of round-off error. Returns measure of sensitivity of solution to element value perturbations. 16K.

Linreg4.0

Arizoftx **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Accepts up to 99 pairs of data points and computes parameters of straight line having best Least-Mean-Square fit to data. Menu selected operations enter data, compute and display parameters, compute and display RMS error and correlation coefficient, and calculate y-values from input x-values using linear equation. 16K.

Lissajous Figures

EZRA GROUP II **Date:** 1983 **Price:** \$1.40 **Platforms:** ZX81, TS 1000
Listing. 1K.

Lunar Cycle

Stephen Zachev **Date:** 1982 **Price:** \$2.00 **Platforms:** TS 1000
Approximation for determining the lunar phase for any day this century; accuracy usually within 1 day; rarely over 3 days. 2K.

Magic Cube Generator

EZRA GROUP II **Date:** 1983 **Price:** \$1.90 **Platforms:** TS 1000
Generates four by four magic cubes. Listing, 16K.

Math #1

S & S Company, The **Model:** T1205/T2205 **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000, TS 2068
Metric: 21 menu selectable conversions; Bascon: computer math base conversion.

Software

MATMAN

Hybridion **Date:** 1984 **Platforms:** TS 1000, TS 2068
Performs all standard matrix functions including input editing.

Matrix Math

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000 16K.

MATSOL

J. B. Thomison **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 1000
Solve any number of simultaneous equations; uses Gaussian elimination with partial pivoting for a fast solution.

Mechanical Design Programs

M. R. Madigan **Date:** 1982 **Price:** \$5.00 **Platforms:** TS 1000
Solutions of machine design problems.

Mega-Stat

Datacon Corporation **Date:** 1983 **Price:** \$15.50 **Platforms:** TS 1000
Perform sophisticates statistical analyses on business and personal data. Accepts data via keyboard or tape. Plots in graphic and digital statistical forms. 16-64K.

Microkjeldahl Protein Determination

Ako Tech **Date:** 1984 **Price:** \$7.00 **Platforms:** TS 1000
Calculates total nitrogen (dry basis) in MG/100G and percent protein (dry or wet basis) for up to 50 items.

MinimUF 3.5

Hawg Wild Software **Author:** Sandy Blaize (W5TVW) **Date:** 1984 **Price:** \$17.95 **Platforms:** TS 1000
Minimum usable frequency radio propagation program.

Moisture-Oven Method

Ako Tech **Date:** 1984 **Price:** \$7.00 **Platforms:** TS 1000
Helps with computation of moisture content of food and agricultural materials.

Accepts raw data from which a table of moisture contents is printed.

Moontracker

Kamel Technology **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Computes position of moon, rising and setting, for any location, any time. 16K.

MOPSY

MOPSY **Date:** 1983 **Price:** \$25.00 **Platforms:** TS 1000
Matrix Operations Programming System. Applications to solve systems of equations, polynomial interpolations, statistical analysis, heat transfer, electrical circuit analysis, animal population studies and more. 16K.

Morse Code Translator

Thomson Software **Date:** 1984 **Price:** \$5.95 **Platforms:** TS 1000
Reads Morse code through cassette port and scrolls translated message across screen. Translates code off the air through earphone jack. Generates code from a character string for recording or hearing through TV speaker. Enter message in English and out comes Morse code. 2K.

Morse Code Translator

Thomas B. Woods **Date:** 1986 **Price:** \$16.95 **Platforms:** TS 2068
Accepts tone decoder input, outputs English on the TV screen or printer. Full screen display, auto scrolling. 5K buffer. Unique built-in signal reader aids in detecting/reducing noise from the system. This program is a great tool for learning Morse code. Requires Universal I/O Port.

Morseman 3

D. R. Navigation **Date:** 1983 **Price:** \$20.00 **Platforms:** TS 1000
Morse displayed as alphanumerics on screen. Training aid; practice for speed and accuracy. Automatic decode option for Morse received by radio with suitable interface. Decode, generation of preset messages, random generation for training. Speeds to 40 wpm.

Multiple Linear Regression

Ako Tech **Date:** 1983 **Price:** \$4.00 **Platforms:** TS 1000
Computes correlation matrix, its inverse, regression coefficients, ANOVA, multiple R and coefficient of determination for up to 15 independent variables and 30 observations.

Multiple Regression

Integrated Data Systems **Date:** 1983 **Price:** \$5.70 **Platforms:** TS 1000
Listing. 16K.

Multiple Regression Analysis

P.A.L. (Programmers at Large) **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000
Max or min up to 48x48 tableau. Tableau must be in standard form. 16K.

MXP

Syber, Inc. **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000
Stores and manipulates complex formulas without programming. Solves equations, function plotting. User-definable functions, engineering (MXP-E), physics (MXP-P), graphs (MXP-O) and math (MXP-M) add-on modules available. 16K.

Numerint4.0

Arizoftx **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
An adaptive quadrature numerical integration routine based upon a Newton-Cotes eight panel formula. Sub-interval sizes automatically adjust to meet accuracy requirements, thereby greatly enhancing the routines efficiency. User supplies integrand function as subroutine. Returns indicator of solution reliability. 16K.

Oblique Trigonometry

Frank Lockhart **Price:** \$9.95 **Platforms:** TS 2068, QL
Solves all non-right angle trigonometry.

Software

Orbit

Robert C. Moler **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Astronomical demonstration program for educators. Draws elliptical orbit shapes based on eccentricity. Also calculates and produces animated display of orbital motion. 16K.

Passive Solar Design Pack

MCS Software **Date:** 1983 **Price:** \$87.85 **Platforms:** TS 1000
Calculates heat loss, solar gain, solar fraction, storage mass.

PC-DRAW

Knighted Computers **Author:** MDM Enterprises **Date:** 1987 **Price:** \$19.95 **Platforms:** TS 2068
Allows user to design detailed printed circuit board artwork which can be printed and photographed to produce a negative for circuit etching.

Circuit is drawn with joystick. Supports all popular printer interfaces and configured for Epson compatible printers.

Physics Solver

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000 16K.

PINS

Zunk Custom Electronics **Date:** 1988 **Price:** \$12.50 **Platforms:** TS 2068
Integrated circuit pinout directory. Store pinout information for any chip up to 40 pins. Fast look up ICs by number or description, and draw the chip on screen with all pin labels and notes.

Pipe Flow

Banta Software **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Calculates the Reynolds number and friction factor for a given flow condition. Finds the head loss in piping systems which include straight pipe, bends, valves, contractions, and enlargements. 16K.

Software

Plane Frame

J. B. Thomison **Date:** 1984 **Price:** \$29.95 **Platforms:** TS 1000
Structural analysis program to determine movement and internal forces generated by external loading on a two dimensional frame. Based on the stiffness method of matrix structural analysis; output formatted for screen and printer. 16K.

Plane Frame

ZETA Software **Date:** 1982 **Price:** \$37.45 **Platforms:** TS 1000
Modeling for engineers. An excellent tool for the professional engineer or an example of state-of-the-art matrix structural analysis for students. A typical database can contain 12 joints, 14 spans, and 7 sections. 16K.

Planetfinder

Kamel Technology **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Computes the right ascension and declination, constellation planet is in v brightness, distance from earth, angular diameter, and phase. For any planet, any date. 16K.

Planets

Robert C. Moler **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Calculates and displays positions of the planets around the sun for a date or series of dates. Can plot planet distances to scale and include a comet. 16K.

Power Supply CAD

Softec **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Computer-aided design tool. Automatically calculate component and circuit values for power supplies.

Prime Numbers

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
Generates primes from 3 to 10 million. Checks numbers for primes. Listing. 1K.

Print-Planets

Robert C. Moler **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000
Uses the high resolution capabilities of the ZX printer to plot the positions of the planets in their orbits. Menu driven with 4 plotting options. Orbits are delineated and planets are plotted with their astronomical symbols. 16K.

Pseudoscope for TS2068

Thomas B. Woods **Date:** 1986 **Price:** \$16.95 **Platforms:** TS 2068
A serial bit stream analyzer which mimics the action of an oscilloscope. Use to graphically portray low frequency digital signals in a horizontal scrolling graph. Program lets you store and compare samples. Print them out on a 2040 printer. Adjustable sample rate, 60hz timing dots are plotted with your input sample. Pseudoscope lets you see Morse, RTTY, serial keyboard signals, etc as a computer sees them. Very useful in program development or in optimizing interface hardware. Tape/instruction book/full disassembly. Requires Universal I/O Port.

Pulleys and Wheels

Frank Lockhart **Price:** \$9.95 **Platforms:** TS 2068, QL
Finds the required force, diameters, lift, weights, etc.

Radiobeacon Qwikplot

D. R. Navigation **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Immediate indication of position obtained from either 2 or 3 RDF bearings. In the latter case, fixed marker indicates median position; flashing plot point shows the limits of the “cocked-hat” indicating the likely accuracy of the observations.

Relativity

Robert C. Moler **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000
Graphically demonstrates effects of relativistic velocities on length of a spacecraft plus time dilation effects. Demonstrates the “twin paradox” on trips to Alpha Centauri and the Andromeda Galaxy.

Rhdonea (Rose) Curve

EZRA GROUP II **Date:** 1983 **Price:** \$1.40 **Platforms:** ZX81, TS 1000
Listing. 1K.

RPN Calculator

ZETA Software **Date:** 1983 **Price:** \$17.45 **Platforms:** TS 1000
Scientific calculator emulation using reverse polish notation. Features include: 50 storage registers, a visible stack, statistical functions, and a key to save a calculation in progress. 16K.

Sci-Pak

ROMPAK **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
A full range of math functions. Graphing, curve fitting, simultaneous equations, polar coordinates, more.

SIFT I

Compucraft **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000
Statistical Interactive system for the Timex/Sinclair 1000 and ZX81 computers, Vol I. Sixteen 2K statistical routines such as: Linear and Multiple Linear Regression with transformations; One-Way, Two-way and Latin Square Analysis of Variance; and T-tests, plus other Non-Parametric two sample tests. A user’s manual (82 pages) with worked out examples and interpretation is included. 2K.

SIFT II

Compucraft **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000
Statistical Interactive-Analysis for Timex Computers, Vol. II. Twenty statistical routines: plots, regressions, analyses of variance, sample tests, correlation analy-

Software

ses, and probabilities. 120 page manual. 16K.

Simplex Algorithm

P.A.L. (Programmers at Large) **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Gives coefficients for up to 10 variables (up to 100 observations per variable). Also gives F statistic for dependent variable. T statistic for each coefficient (and constant term) coefficient of determination and standard deviation of dependent variable. 16K.

Small User’s Math (SUM)

Ken Lewis **Price:** \$15.00 **Platforms:** TS 1000
Compendium of numerical programs for the small system user. Equations to handle first and second order differential equations, matrix eigenvalue/vector solution, curve fitting and cubic spline routines, determinants, matrix inversions, Laplace/Poisson equation, heat or molecular diffusion and more.

Speed of Sound Calculator

Robert J. Sabbia **Date:** 1984 **Price:** \$2.00 **Platforms:** TS 1000
Gives speed simultaneously in ft/sec. MPH, knots with only a user input of the ambient air temperature at the desired altitude.

Spiral of Archimedes

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** TS 1000
Listing, 1K.

Spur Gear Drives

Frank Lockhart **Price:** \$9.95 **Platforms:** TS 1000, TS 2068, QL
Calculates gear sizes, number of teeth, ratios and more. Gives 14 answers in two seconds.

Software

Stat Master

SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Provides most useful descriptive operations on your data files. Variances, co-variance, standard deviation, standard error, chi-square, hypothesis testing, confidence intervals, all means. 16K.

Statistical Correlation

Woods End Laboratory **Date:** 1984 **Platforms:** TS 1000

Multiple regression program. Accepts up to 10 variables, computes, and prints to standard printer. Min, max, mean, SD, simple correlation matrix, multiple correlation with stepwise drop-out routine, F-values and probability.

Statistical Graph Generator

Wizard Works, The **Date:** 1984 **Price:** \$4.95 **Platforms:** TS 1000

Generate graphs for budgets, investments, etc. Includes self-centering titles and dates, automatic calculation of scaler. Supports both TS 2040 and CAI printers.

Statistical Pac

Kimtech **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000

Four statistics programs. Chi-square (goodness of fit) calculations, analysis of a data set including hypothesis testing and confidence intervals, comparison of two data sets using hypothesis testing and confidence intervals, and simple linear regression including t-value and R2. 16K

Statistical Programs

Ako Tech **Date:** 1983 **Price:** \$1.50 **Platforms:** TS 1000

Regression, ANOVA, Complete Block, Randomized Block, and Latin Squares.

Statistics

Hewson Consultants **Date:** 1982 **Price:** \$7.50 **Platforms:** ZX81, TS 1000

Three statistics programs. Programs compute current mean and standard deviation, regression, and trend. 1K.

Statistics

Bridge Software **Date:** 1982 **Price:** \$9.00 **Platforms:** ZX81, TS 1000 1K.

Statistics

ZETA Software **Date:** 1983 **Price:** \$17.45 **Platforms:** TS 1000

Statistical analysis and data display. 1 variable with histogram or 2-or-more variables with plot. Results include: sum, variance, standard deviation, error, means, skewness and kurtosis. 16K.

Statistics Pack

MCS Software **Date:** 1983 **Price:** \$19.74 **Platforms:** TS 1000

Force, moment, couple, friction, vectors, US-SI conversions.

Statistics Package

Computer Software Associates **Date:** 1983 **Price:** \$12.95 **Platforms:** ZX81, TS 1000

Four programs with error-correcting facilities to compute statistics. Can compute mean, standard deviation, variance, correlation coefficient, regression, equation, confidence interval for mean, 3 applications of the “t” test and the “F” test of the ratio between independent sample variances. 1K.

Statistics Programs

Intercomputer, Inc. **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000

Book \$12.95, 6 cassettes \$17.95

Steel Beam Design

Doran Engineering, P.A. **Price:** \$29.00 **Platforms:** TS 1000

Calculates and displays the required steel beam (W-section) based on input of span, load and loading type. 12 options of beam type and loading. 16K.

Sunrise/Sunset

I. M. S. Enterprises **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Complete months or years of tables for sunrise/sunset times every 3 days for any location and time zone.

Suntracker

Kamel Technology **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Computes position of sun, sunrise, sunset for any location, any time. 16K.

Super Fn Plot

JRC Software **Date:** 1983 **Price:** \$1.00 **Platforms:** TS 1000

Plots any function in the form y=f(x); draws it to the correct vertical scale on screen. Plots are white on black background. Compiles a machine code routine to plot same function at high speed. 2K.

Super-Stats

Kinetronics Corp **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Statistical tools. Includes mean, standard deviations, Pearson R coefficient of correlation, Chi square, etc. 16K.

Surveyors Travers Correction

MCS Software **Date:** 1983 **Price:** \$52.85 **Platforms:** TS 1000

Adjusts angles turned, bearings, error of closure, area of plot, for closed, loop travers.

Telescope Design

Bob Woish **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000

Asks for desired objective diameter and f/ratio, inputs physical dimensions and optical data for a Newtonian reflector optical assembly. Saves hours of calculation. 2K.

Temperature Conversion

Italian Connection, The **Date:** 1981 **Price:** \$4.95 **Platforms:** ZX81, TS 1000 1K.

The Calculus

Imre Auersbacher **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 1000, TS 2068

Sophisticated programs for numerical integration, differentiation, 1, 2, 3rd derivatives of function, 1st & 2nd differential equations by Runge-Kutta and Adams-Moulton methods. 2K.

Software

The Matrix Package

Stephen Zachev **Date:** 1983 **Price:** \$4.00 **Platforms:** TS 1000

Four separate topics of matrix multiplication, addition, subtraction, and transformation of user-defined matrices. 2K.

Theile Cabinets

Mallard Software **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000

Complete program for designing/testing bass and subwoofer speaker cabinets. Includes simplified measurement procedures and 2 unique alignments for very small bass cabinets.

Timber Beam Design

Doran Engineering, P.A. **Price:** \$29.00 **Platforms:** TS 1000

Calculates the section modulus and chooses timber beam to comply, then checks the horizontal shear of the selected beam and revises if necessary. 3 options of beam type and loading. Choice of timber grade and allowable stress. 16K.

Trigonometry

Frank Lockhart **Price:** \$9.95 **Platforms:** TS 1000, TS 2068, QL

Solves right triangle problems fast.

Variance Analyzer

ZETA Software **Date:** 1983 **Price:** \$17.45 **Platforms:** TS 1000

A data analysis program for examining 1- or 2- way AOV and 2-way AOCOV. Includes: degrees of freedom, sums of squares and products, and means. 16K.

VDAQ1

Fred Nachbaur **Date:** 1985 **Platforms:** TS 1000

Votem Data Acquisition - Hi-Res. Written VOTEM, a simple voltage-to-frequency converter, designed for single-channel analog data acquisition. Allows multi-screen acquisition, variable scale and timebase. Without the VOTEM, it was useful for frequency measurement, via the tape input jack. 16K.

Software

Vectors and Hyperbolics Functions, Combo III

JPR Software, Inc. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Hyperbolic functions; dot and cross product of vectors; vector addition and subtraction; etc.

Weather Forecaster

Richard Toy **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Requires barometer. Forecast 36 hours in advance. 16K.

Weight Calculations

Frank Lockhart **Price:** \$9.95 **Platforms:** TS 2068, QL
25 metals, 11 woods, 11 other materials. Varied shapes in all sizes. Fast answers.

Wire and Metal Rod

Frank Lockhart **Price:** \$9.95 **Platforms:** TS 2068, QL
Calculate quantities, costs, weights.

World’s Most Magic Square

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
8x8 and 16x16 magic squares. Listing. 1K.

ZQ-1

J. R. Carr **Date:** 1983 **Price:** \$16.00 **Platforms:** TS 1000
Electronics calculator. Calculates: Ohm’s law for DC, X, Z, real and effective power and power factor. X of C, X of L, X total. Z series or parallel and phase angle. Circuit “0” series or parallel, loaded or unloaded. Circuit resistance at resources, series or parallel. Solenoid coil design. In any routine, give it any two known quantities, and it will calculate the third. 16K.

ZX Forecasting

Applied Software Development Association, Inc. **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000
Forecasting software with a number of methods. Includes moving averages,

weighted moving averages, linear exponential smoothing, quadratic exponential smoothing, trend analysis, length-squares regression, correlation co-efficient, co-efficient of determination, standard error of estimate, mean, student deviation. 16K.

Software

IRA PROGRAM

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SOUTHERN PINES, NC 28387

YOU CAN CHOOSE THREE DIFFERENT MODES.

- 1 SCHEDULES, INFLATION , AND TAX IMPACTS.
- 2 TIME REQUIRED TO GET A DESIRED SUM.
- 3 DEPOSIT CHANGES.

ALL SECTIONS HAVE INCOME STREAM OPTIONS.

DO YOU WANT SECTION 1, 2, OR 3?
INDICATE WHICH?



Finance

The early years of home computers were filled with hours of budget balancing, financial planning, stock tracking, mortgage amortization and other exciting financial tasks.

As with certain other categories, at lease some of this software sold enough copies to justify the work that went into producing it. Whether it was used enough to justify its purchase is another question entirely.

Amortization Pack

Games to Learn By, Inc. **Date:** 1983
Price: \$12.95 **Platforms:** TS 2068
Analysis tool for determining best case and worst case future actions.

Amortizer

L. A. Westhaver **Date:** 1983 **Price:** \$8.98 **Platforms:** TS 1000
Computes monthly payments, total cost of loan, interest and principal amounts per month. 16K.

Analysis

Orion’s Belt Enterprises **Date:** 1982
Price: \$17.95 **Platforms:** TS 1000, TS 2068
Stock selection guidance. Fundamental stock analysis. One time input using data in newspapers/library. Make buy/hold/sell decisions. Uses linear regression techniques to forecast expected earnings and corresponding market data. 16K.

Budget Program

Al Jorgensen **Date:** 1983 **Price:** \$5.00
Platforms: ZX80, ZX81, TS 1000
Tells how much you have to spend per pay period (works on any pay period length) and how much you have left. 1K and 16K.

Business Depreciation

Florida Creations **Date:** 1983 **Price:** \$2.00 **Platforms:** ZX81, TS 1000
Calculates yearly depreciation and book value. Calculated using straight line method, sum of the year’s digits method and double declining balance method. 1K.

Call/Put Stock Options Analysis

Air Capital Software **Date:** 1983 **Price:** \$25.00 **Platforms:** TS 1000
Make objective strategy decisions. Requires only current options data from popular financial publications. In-depth analysis using extension of Black-Scholes model. Nine options per run ranked by potential profit, loss, expected return. 16K.

Checkbook Balancer

Maranatha **Date:** 1983 **Price:** \$7.95
Platforms: TS 1000 16K.

Checkbook Keeper/Balancer

Bottle Cap Software **Author:** Mike Fellerski **Date:** 1991 **Price:** \$5.00 **Platforms:** TS 2068
Program to track checks, deposits and withdrawals. Allows balancing against bank statement. Requires OS 64.

Checkbook/Bill Payer

Run-It Software Club **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Checkbook lets you create categories for expense tracking and perform monthly bank reconciliation. Bill Payer keeps running file of creditors, amounts, due dates. 16K.

Checkstub

RCO Technical **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Checkbook management program. Thirty user-definable categories.

Comp-U-Share Personal Home Finance

Micromega **Date:** 1982 **Price:** \$24.95
Platforms: TS 1000
Maintain an up to date portfolio of your stocks, bonds, or other financial investments. Monitor your results or run a forecast of expected results. Includes P/E ratios, dividends, etc. 16K.

Complete Portfolio Management

Teletek Co. **Date:** 1983 **Price:** \$9.95
Platforms: TS 1000
Inventory and analysis (e.g., profit, loss, yield, dates). Market Forecast. 16K.

Deduc-table

Markel Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Menu driven program to track a year’s worth of tax deductions. Twenty user defined categories. Each category may con-

Software

tain 25 entries. Entries include date, de-
scription (comments), and dollar amounts.
Review individual files, or totals Y.T.D. Self
-starting, self-naming, self-saving. 48K.

Depreciation

Theodore J. Dunn **Date:** 1983 **Price:**
\$8.00 **Platforms:** TS 1000
Accelerated cost recovery system
(ACRS). 16K.

Fed-Tax Software System

Toco Technology **Date:** 1983 **Price:**
\$10.95 **Platforms:** TS 1000
Three programs for completing federal
income tax returns.

Federal Tax Forms

Computer-Wear Software **Date:** 1983
Price: \$11.95 **Platforms:** TS 1000
Fully-automatic/completely reliable pro-
gram does Federal Income Tax Forms. All
mathematical computations are done by
your computer. Works for every filing sta-
tus.

Finance Management

Creitech **Date:** 1983 **Price:** \$9.95 **Plat-**
forms: TS 1000
16K.

Finance Pac

Simplex Software **Date:** 1983 **Price:**
\$9.95 **Platforms:** TS 1000
Checkbook Balancer: reconciles check
register with bank statement. Net Present
Values: computes net present value of a
series of cash flows. Auto Loan Analysis:
computes amount of loan and monthly pay-
ments.

Finance Planner

Games to Learn By, Inc. **Date:** 1983
Price: \$12.95 **Platforms:** TS 2068
Handy tool for evaluating cash flow, in-
vestments, loans or stock market specula-
tions.

Finance-Manager

Computer Assistance Incorporated
Date: 1983 **Price:** \$14.95 **Platforms:**
TS 1000
Combines budgeting, record keeping,
and check reconciliation into one opera-
tion. 16K.

Financial Aid

SCDF **Date:** 1984 **Platforms:** TS 1000
Evaluate financial statements. Prints a
series of questions seeking input from the
balance sheet and income statement.
Prints 18 financial measures/ratios ranging
from mark-up to ROI to collection period.

Financial Analysis

Bob Norman **Date:** 1983 **Price:** \$8.95
Platforms: TS 1000
Analysis of retirement and investment
savings. Standard savings and IRAs, show-
ing tax, interest, retirement income, infla-
tion, comparison and plot. 16K.

Financial Analyzer

Discount Software, Inc. **Date:** 1983
Price: \$8.95 **Platforms:** TS 1000
Spreadsheet.

Financial Analyzer

SyncMaster **Date:** 1983 **Price:** \$14.95
Platforms: TS 1000
Home and personal financial calcula-
tions. Mortgage principal pre-payment; pro-
jected IRA value; true yield on investment;
standard interest rate calculations. 16K.

Financial-Pak

ROMPAK **Date:** 1983 **Price:** \$14.95
Platforms: TS 1000
“Money Matters”: wise counsel on inter-
est rates, loans, mortgages, net worth,
more.

FINST

Advanced Energy Systems Software
Group **Date:** 1983 **Price:** \$7.95 **Plat-**
forms: TS 1000
Financial statement analysis. Com-
putes all relevant data and ratios for evalu-

ation of a company’s balance sheet and in-
come statement. 16K.

Fundamental Analysis

ZETA Software **Platforms:** TS 1000
For stock investors.

Fundamentals

UAS **Date:** 1983 **Price:** \$7.95 **Plat-**
forms: TS 1000
Evaluate your stocks by the seven key
factors used by successful stock market an-
alysts. Also includes a subprogram for dol-
lar cost averaging. 16K.

Home Finance Manager

Sourceware, Inc. **Date:** 1983 **Price:**
\$14.95 **Platforms:** TS 1000
Up to 17 user-defined income and ex-
pense categories to track monthly finances
for income tax reference.

Home Financial Planning

BASCO **Date:** 1983 **Price:** \$7.50 **Plat-**
forms: TS 1000
Two programs to help you invest your
money and project interest on installment
loans. Interest received projection esti-
mates the future return on an investment
using compounding of interest by com-
pounding period. Loan payment projection
estimates the monthly payment for an in-
stallment loan based on the amount bor-
rowed, length of time and interest rate us-
ing compounding. 16K.

How to Make Good Invest-
ments

Wizards, The **Date:** 1983 **Price:** \$39.95
Platforms: TS 1000
Course 1 in a series of courses on in-
vestment and financial analysis. Covers the
same material as covered in business
schools with some practical techniques.
Programs and examples as learning aids
and tools for later investment. Ideal for be-
ginner or occasional investor.

Income Tax

Z-West **Date:** 1983 **Price:** \$8.95 **Plat-**
forms: TS 1000

Software

Income Tax Projections

General Systems Consulting **Date:**
1982 **Price:** \$9.95 **Platforms:** TS 1000
16K.

Income Taxes

ORBYTE Software **Date:** 1982 **Price:**
\$16.95 **Platforms:** TS 1000
Contains all information necessary to
guide you through the IRS forms. Step-by-
step instructions. Does the mathematical
calculations. Continuous updates allow the
program to be used year after year. 16K.

INLOAN

Advanced Energy Systems Software
Group **Date:** 1983 **Price:** \$7.95 **Plat-**
forms: TS 1000
Investment/loan analysis. Computes ei-
ther amount, payment, interest rate or time
given any of the other three elements. 16K.

IRA Organizer

John B. Carson, Jr. **Date:** 1984 **Price:**
\$16.50 **Platforms:** TS 1000
Maintain a complete permanent record
of all IRA transactions. Subtotals and ac-
count balance computed.

IRR/NPV

Advanced Energy Systems Software
Group **Date:** 1983 **Price:** \$7.95 **Plat-**
forms: TS 1000
Internal rate of return/net present value
analysis. Computes IRR, NPV or both for
an investment given a series of annual
cash flows. 16K.

Loan

Biocal Software **Platforms:** TS 1000
Generates loan payment schedules.
Check interest vs. principal. Evaluate time
payments.

Loan Amortization

WMJ Data Systems **Date:** 1984 **Price:**
\$15.00 **Platforms:** TS 1000
Shows breakdown between principal
and interest on loan payments. Provide any
three factors (amount, interest rate, number
of payments or payment) amount program

Software

will calculate the unknown factor Any payment factor can be used: monthly, weekly, daily, etc. program will break out the interest and principal portions of each payment for any period desired; it will also total each column.

Loan Analysis

R. S. Panwar **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Helps analyze loan with menu and instructions. Calculates monthly payment for a loan; duration to pay back a loan; affordable loan amount; compare various loans; manipulate loan parameters; amortization tables; interest charges; compound interest; appreciated value of an investment; depreciation (straight line, declining balance, sum of digits).

Loan Helper

Z-West **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
Display the total cost of any loan, interest paid, and period balances. You can better judge your financial obligations with this program, and make an efficient decision for loan application. 16K.

Manage Your Stock Portfolio

UAS **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
Track your portfolio of stocks to assess your profit and losses through various periods. Check your performance against your investment goals and as compared with the current inflation rates. 16K.

Market Guru

Run-It Software Club **Date:** 1983 **Price:** \$13.95 **Platforms:** TS 1000
Spot market trends and keep track of stocks. Tape 1 plots moving averages of market statistics and stocks starting you off with a 2-year Dow Jones and S&P data base. Tape 2 stores vital information on specific stocks for point and figure analysis. 16K.

Maxi-Bill Credit Card Payer

Bottle Cap Software **Author:** Mike Fellerski **Date:** 1991 **Price:** \$5.00 **Platforms:** TS 2068
Helps sort credit card bills to determine how much to pay on each bill to maximize interest savings. Requires OS 64.

Money Analyzer 1

Timex Computer Corporation **Model:** 02-1001 **Author:** T.J. Software **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Two programs: Savings, Loans. Savings: Analyze your savings plan, establish goals, and determine how best to attain them. Loans: Figure out loan repayments instantly, for both one-time and monthly repayment schedules. 2K.

Mortgage Advisor

Run-It Software Club **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Displays annual or monthly mortgage tables. Shows balance remaining and total interest paid for given period Rule of 78 section compares this interest with conventional loans. 16K.

Mortgagor

Theodore J. Dunn **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000
Amortization program. 16K.

Mutual Fund Advisor

Computer Engineering Services (The Jarrett Company) **Author:** Rolf L. Miller **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
A program based on a proven method for investing in no-load mutual funds. Records can be saved and then loaded. If you are an investor, this program is for you. Instructions and listing.

Mutual Fund Master

Stock Market Software **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 1000
Store entire mutual funds listing, up to 600 stocks.

Mutual Fund Minder

Stock Market Software **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 1000
Keep track of stocks you own showing current value of investment, percent gain or loss and other data.

N.Y. State Tax

Computer-Wear Software **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000
Fully-automatic/completely reliable program does N.Y. State/City taxes in minutes. Includes tax tables; all mathematical computations are done by your computer. Works for every filing status. Contains integral standard deduction routines. 16K.

Nest Egg II

Computer Ware Publishing **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 1000
Strategic financial-planning program. Calculate retirement finances, your children's education, vacation plans, and trust funds. Test several assumptions and calculate alternative futures.

Payoff

JGS **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Calculates year to pay off credit cards, total finance costs, added finance cost of new purchases, ways to pay early and save money. 16K.

Personal Accountant

Softsync, Inc. **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 2068
Three integrated programs. Compile reports, automatic posting, data base, add messages to entries, profit/loss statements, amortization/payment schedules; create as many accounts as you need; single entry posted into proper categories.

Personal Asset Manager

AND Software **Date:** 1985 **Price:** \$14.95 **Platforms:** TS 2068
Menu-driven program to manage up to 18 assets. Performs analysis on asset values, calculates current value, annualized capitalization, gains, dividends and more.

Software

Personal Bank Account Management System

Micromega **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Monthly statement reconciliation. Search by item or type of expenditure. 16K.

Personal Finance

Sophia Systems **Date:** 1983 **Price:** \$14.00 **Platforms:** TS 1000
Three programs on one tape: Stocks, IA, Loans. Stock portfolio database allows you to store stocks, add or change, obtain the value of each stock, the whole portfolio, all of any type of stock. IA determines various income from compound interest and annuities. LOANS will amortize a loan, calculate the regular payment, last payment, term, actual rate, or remaining balance at any time. 16K.

Personal Finances, Part I

Skinner Electronic Enterprises **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
8 routines that use compound interest. Calculate accumulated interest, time to accumulate, rate of return, investment required, future value, future value with daily compounding, conversion to effective annual rate, and conversion of add-on interest to APR. 16K.

Personal Finances, Part II

Skinner Electronic Enterprises **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
3 routines for calculating IRA account balances using single annual, regular monthly, or irregular monthly deposits. 5 routines using simple interest to find total interest paid, time to accumulate, rate of return, investment required, and future value. 16K.

Personal Finances, Part III

Skinner Electronic Enterprises **Date:** 1984 **Price:** \$12.95 **Platforms:** TS 1000
Loan amortization routines. Calculates the number of payments, interest rate, pay-

Software

ment required, how much can be borrowed, total interest paid, remaining balance, re-fund on early payoff and prints an amortiza-tion table in 32 column double line format. 16K.

Personal Portfolio Manager

Timex Computer Corporation **Model:** 06-2009 **Author:** Rodger B. Cram **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

Maintains an unlimited number of port-folio files of up to 75 stocks with 12 buy/ sell transactions per stock. Historical informa-tion and bar graphs provides a broad per-spective of the profitability of your invest-ments. Capital gains data expedites tax work at the end of the year.

Personal Stock Planning

Gladstone Electronics **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000

Contains four programs recorded on 2 tapes, accompanied by a detailed manual. To help you plan, record and control your stock market activities. These programs have been adapted for the ZX81 and T/S 1000 from routines used in large scale computers by a leading software house. Programs include: Dow Jones Moving Av-erage; Personal Stock/Bond Transaction Recorder; Portfolio Review; Point and Fig-ure.

Personal Wealth Achiever

Teletek Co. **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000

Increase income and net worth with lit-tle time, effort or risk. Get finances under control and expand your earnings capabil-ity. Proven wealth accumulators, with graphic displays, will help you to gain finan-cial independence. 16K.

Personalised Share Portfolio

M. A. Smith **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000

Menu driven with add/delete facility; full schedule with graphic presentation. Capital gains calculation; Dow Jones Index com-

pared with share performance; auto print capability. 16K.

Portfolio

Orion’s Belt Enterprises **Date:** 1982 **Price:** \$13.95 **Platforms:** TS 1000, TS 2068

Investment portfolio file management. Maintain records of shares, cost, perfor-mance, and selling price targets of up to 50 stocks, bonds, mutual funds. Menu driven. List file, records; record maintenance or file update options. Input current market prices and program recalculates overall portfolio and individual security performance as well. 16K.

Portfolio Analysis

Timex Computer Corporation **Model:** 03-2014 **Author:** American Micro Prod-ucts, Inc **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Program performs minimum risk and market sensitivity calculations for a portfolio composed from a set of stocks. A portfolio is found which gives the minimum amount of non-market risk for a given level of sensi-tivity. 16K.

Pound/Dollar Conversion

Italian Connection, The **Date:** 1981 **Price:** \$4.95 **Platforms:** ZX81, TS 1000 1K.

QWIK-1040

ABBA Soft **Date:** 1988 **Price:** \$29.50 **Platforms:** TS 2068

Tax return software.

QWIK-1040-88

ABBA Soft **Price:** \$29.50 **Platforms:** TS 2068

Income tax filing software.

Real Estate

UAS **Date:** 1983 **Price:** \$12.95 **Plat-forms:** TS 1000

Allows you to input the key investment details on up to three different properties and then calculates the cash flow and the

return on investment for comparison. Cal-culations are done before and after taxes. You can play “what if” simulations. 16K.

Savings & Loan Advisor

Pegasus Micro Systems **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000, TS 2000, TS 2068

Mortgage amortization and investment counselor. 16K.

Spec-Tax for 2068

Poretsky & Poretsky **Date:** 1984 **Price:** \$20.00 **Platforms:** TS 2068 1040 and most schedules.

Stock Analysis and Portfolio

Memory Master **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000

Two stock management programs. Stock analysis takes data on any stock, computes total cost including broker’s com-mission, and computes the result of any number of call options entered including gain, yield, time held and more. Portfolio holds information on up to 10 stocks and computes gain, yield, etc. Displays a com-posite view of all stocks held. Easily up-dated, changed, or deleted. 16K.

Stock Market Calculator, The

Softsync, Inc. **Date:** 1982 **Platforms:** TS 1000

Written by an experienced stock market executive, this program is made up of two sections. “MKT1” contains Net Price Work-sheet, Profit/loss and Covered Write Work-sheet. “MKT2” uses the Net Price Work-sheet and adds the Write Unwrapper. You can alter variables after the initial run, en-abling you to try different price and invest-ment alternatives.

Stock Market Price Analysis

Thomas H Nooter **Date:** 1982 **Price:** \$30.00 **Platforms:** TS 1000, TS 2068

Track up to six stocks, averages or commodities. Produces graphs and techni-cal indicators to help make trades. Also known as “Nooter Stock Program.” 16K.

Software

Marketed by Timex as Stock Market Tech Analysis I.

Stock Market Program

Teletek Co. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Manages your portfolio, maintains records of securities you have bought and sold. Analysis provides 12 different listings (gains, loss, dates, yields, etc.) On side 2 of cassette, program for market forecast. 16K.

Stock Option Analyzer, The

Timex Computer Corporation **Model:** 03-2007 **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000

Evaluate stock options quickly. Output includes an unexercised ROI, annual ROI, and net worth. 16K.

Stock Options

UAS **Date:** 1983 **Price:** \$7.95 **Plat-forms:** TS 1000

Stock options can open up a new in-vestment horizon for you when you know the timing for buying and selling them. Re-member they require less investment than stocks. The program will calculate the pro-jected rate of return over the life of the op-tion and allow you to compare various stock option combinations. 16K.

Stock Portfolio

M. H. Marks Enterprises **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Store all pertinent data of up to ten dif-ferent stocks at a time. Continuously calcu-lates gains, yields (including dividends re-ceived) and length of time held of individual stocks as well as a composite view of all holdings. Each stock entry can be easily modified or deleted. 16K.

Stock Returns

American Micro Products, Inc **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000

Enter the selling price of stocks along with their annual dividends in order to ob-tain the return on the investment for any combination of years. 16K.

Stock Watch

WMJ Data Systems **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000, TS 2068
Tracks stock transactions, including broker's fee. Spreadsheet format. 16K.

Stocktaker

D. C. Roberts **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
Provides comprehensive and automatic valuation and stocktaking facilities for the small businessman, sports and social clubs, or domestic use. Menu driven with paging; full screen tabular display in six columns with sub and grand total options. 16K.

Super Mortgage

BASCO **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Compare various mortgage amounts, terms, and interest rates. A range of comparisons for each element of the mortgage is allowed and detailed output tables are provided. A detailed amortization schedule is also provided as an option. 16K.

T/S-ZX Financial Report Generator

A.F.R. Software **Date:** 1985 **Price:** \$29.95 **Platforms:** TS 1000
Accounting software.

Tape (8) Investment

Roman Software **Date:** 1982 **Price:** \$8.00 **Platforms:** ZX81, TS 1000
Interest percentage and more. 8 programs. 1K.

Tax Command

Practical Programs Inc. **Date:** 1984 **Price:** \$24.95 **Platforms:** TS 1000
Federal income tax forms with tax tables built in. 16K.

Tax Program

Eugene Bock, Associates **Date:** 1983 **Price:** \$29.75 **Platforms:** TS 1000
Tax program to assist you in organizing/preparing an accurate return. 1040 Schedule A-B on 16k cassette.

Tax Return Helper

KSOFT **Date:** 1982 **Price:** \$14.00 **Platforms:** TS 1000, TS 2068
Form 1040 and most schedules. Enter and modify data on a screen copy of the form. TS 2068 version in 1984.

Tax Return Organizer

WMJ Data Systems **Date:** 1984 **Price:** \$15.00 **Platforms:** TS 1000, TS 2068
Helps organize tax records for individuals. Written by an accountant to help organize tax records. Program asks questions which you answer by using your W-2 forms, interest statements, etc. Can be used year after year program provides hard copy for tax records.

Taxware

Theodore J. Dunn **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000
Ten programs for the 1982 tax return. Menu driven; self-modified; savable. Schedules A/B, C, E, G, SE, and Forms 2106, 2119, 2210, and 3468. 16K.

Techni-Stock Market Analysis

SyncMaster **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000
Detailed price/volume charts on logarithmic grids. Includes 16 weeks of data of 6 favorite stocks.

Techni-Stock Software System

Toco Technology **Date:** 1983 **Price:** \$34.95 **Platforms:** TS 1000
Technical stock analysis to predict stock and market movements. 6 functions: input price-volume data from worksheet; update data; 16 week data listing; detailed price-volume data chart; technical analysis evaluation based on statistical averages, moving average trends, price momentum.

The IRA Planner

Timex Computer Corporation **Model:** 03-2010 **Author:** V. Chase **Date:** 1982 **Price:** \$15.95 **Platforms:** TS 1000
Determine the net effect of your IRA planning. Periodic contributions, inflation adjustments, interest earned and a host of

other variables are established and your retirement amount is calculated in both inflationary and current dollars. 16K.

The Tax Helper Series

Software Lab East **Date:** 1983 **Platforms:** TS 1000
Uses artificial intelligence to assist the user to prepare common personal and small business tax forms. The programs ask the user questions and tell which amounts should be placed on each line of the tax form. 16K.

U.S. Savings Bonds

John B. Carson, Jr. **Date:** 1982 **Price:** \$2.50 **Platforms:** TS 1000
List the series, issue date, serial number, and denomination for 25 bonds. Add or delete bonds, make changes, increase or decrease number listed. 16K.

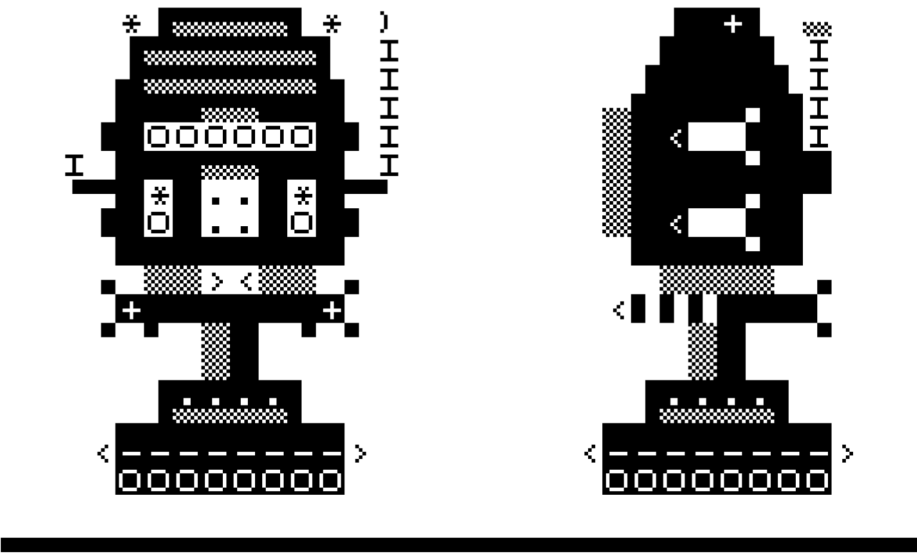
Wall Street Wizard

M. H. Marks Enterprises **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Calculates broker's commission on any stock in any quantity. Calculates gains and yields on currently held stocks. Call Option strategy also is incorporated into this program: When you buy a stock and sell an option against the stock, the computer will calculate what will happen on expiration date of the option. 16K.

ZX1040

ZX1040 Software **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000
Income tax preparation software. Standard form, itemized deductions and 1982 tax tables included.

ZOR- PROTON CLASS BATTLE ROBOT



Games

The size of this category should come as no surprise: there are more than 1,100 games listed here. In addition to (or despite) the legitimate uses of a computer, playing games has long been one of the most popular uses.

Sinclair owners had games that fit every sub-category, from text adventures to copies of commercial arcade titles. Everything from conversions of arcade games like PacMan and Frogger to simple implementations of Tic-Tac-Toe are represented. The breadth and diversity of subjects is impressive, especially in what programmers managed to accomplish with limited RAM and graphic capacity.

(Escape from) Mars

AARDVARK **Author:** Rodger Olsen
Date: 1982 **Price:** \$14.95 **Platforms:** TS 1000

Explore a Martian city and deal with possibly hostile aliens to survive. 16K.

\$CRYTPIC GOLD\$

Tex Micro Inc. **Date:** 1984 **Price:** \$30.00 **Platforms:** ZX81, TS 1000, TS 1500

combines a 2K BASIC program, a game board, answer data, a program listing and a tape on which to save your program. This trivia game generates the next question from the correct answer to the previous one—but wrong answers garble the following question. Tex Micro planned tournaments with cash prizes around major holidays, with “GO” codes published in a national daily newspaper.

1 Arm Bandit

Game Room, The **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000

Slot machine. 16K.

10 1K Programs

Q&M Publishing **Date:** 1983 **Price:** \$3.00 **Platforms:** ZX81, TS 1000

10 programs reveal moving graphics techniques. Planes, D&D, tanks and more. 1K.

10 Exciting Programs

Melbourne House **Author:** Clifford Ramshaw **Date:** 1982 **Price:** \$14.95 **Platforms:** ZX81, TS 1000

Space favorites: Lunar Lander, Star Trek, Shuttle Pilot, Alien Alert, Space Escape. Arcade games: Shoot Out, Kamikaze Pilot, Battle Zone, Brands Hatch, and Corridors of Death. Includes suggestions for upgrading the games for the TS 1000 with additional memory. 1K.

10 Games Pack

ZETA Software **Date:** 1981 **Price:** \$17.50 **Platforms:** ZX80

1 Key Bandit, Turret Gunner, Guillotine, Blackjack, Barrage, Foil Fencing, Bomb Run, Arcade Invaders 2, Flyswatter, Wormhole. 1K.

10 Great Games

Savage Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Includes Pacmaze, Gobler, Astro Star Defender, Vampires, Suicide, Minefield, Frogler, Startrek, Dictator, Bomber. 16K.

10 Programs

Frog Software **Date:** 1983 **Price:** \$2.95 **Platforms:** ZX81, TS 1000

Includes three video games, math and household programs, Las Vegas games. 1K

18 Hole Golf

Robert J. Midura **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000

Play 9 or 18 holes against another player or the computer. The better your practicing performance, the more consistent your play will become. A different course for each round played. Up to 5 players. 16K.

18 Hole Golf Game

Original Software **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000

Each course, ball and hole are printed. Shows hole number, shot number and current score. Courses get progressively more difficult.

1K Chess

Artic Computing **Date:** 1982 **Price:** \$14.95 **Platforms:** ZX81, TS 1000

A good introduction to chess. Full graphic representation of the chess board is included. Single level of play. Does not accept castling or en-passant moves.

Software

1K Games

Artic Computing **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
A selection of 11 exciting games for the unexpanded ZX81 or T/S1000 computer. Games include: Slot Machine, Etch and Sketch, Slalom Ski, Catch Me If You Can, Space Pirate, Spacefire (2 versions), Car Crash, Man-Eating Budgies, Maze and the Wall.

1K Games

Computer Software Associates **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Five games. Duck Shoot: All the excitement of duck hunting, without getting up at 4 a.m. Moon Lander: If you thought Neil Armstrong had it easy, this is your turn to try to land on the Moon. Hangman: 1 or 2 players; sharpen your spelling skills. Crossword: Challenging, mind-boggling word association. Letter Square: Arrange the alphabet in correct order.

1K Gamestape

Sourceware, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** ZX81, TS 1000

23 Bricks

P. Nethercot & R. Rackstraw **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
A game of mathematical strategy. It starts with 23 bricks and players may take 1, 2, or 3 at a time. The idea is to leave your computer with the last brick. 16K.

2K Chess

International Publishing & Software Inc **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Improved chess game for an unexpanded TS 1000. Better graphics and a vastly superior range of moves.

2K Fun Pack

Human Engineered Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Three arcade type games in one package. Includes Music Maker, Breakout, and Invaders. 2K.

2K Game Pack

Compuwiz Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Five simple programs. Kaleidoscope: Dazzles you with super displays. Over Under and Remember: Two challenging and thought provoking card games. Reverse: Explore your skills in logical thinking. Sketch: Let your imagination run wild and become an artist. 2K.

2K Game Pack Special

Bob Woish **Date:** 1983 **Price:** \$5.95 **Platforms:** TS 1000
Includes: Compu-Pen, Galaxy, Sink the Sub, Mine Field, Hi-or-Lo, and Day. 2K.

2K Games Pack

Softsync, Inc. **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
6 great graphically illustrated games on one cassette for the unexpanded TS 1000. Copter Patrol: Blow out the enemy defense system. Astrowalk: Reunite with the mothership or else. Killer Whale: Before surfacing for air, the whale must eat as much as possible. Monster Masher: The monster is on the loose. Star Blaster: Blast a path home through the star cluttered galaxy. Dragon Slayer: Escape the hunter.

2K Games Pack

BARLOG Software **Date:** 1983 **Price:** \$7.00 **Platforms:** TS 1000
Pyramid: Try to stop treasure hunters from stealing your gold by throwing rocks at them. Invasion from Mars: Protect the two manufacturing plants from the alien men drifting down towards them. 2K.

Software

3D Black Star

Quicksilva **Author:** M. Sudworth **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 1000
Explosions mushroom around you; the rear scanner shows pursuing craft. Increase speed and fire; dodge from side to side of the narrow corridor. Fast 3D graphics, warp drive and full instrument display.

3D Space Battle

Ventamatic Micro Informatics **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
You are in the starfighter cockpit and the screen is your window over an unlimited universe. You see alien starfighters coming and firing their photon beams. Destroy as many as you can with your laser gun while you have energy. 16K

3D Strategy

Quicksilva **Date:** 1983 **Platforms:** TS 2068
Tic-tac-toe played on a 4x4x4 grid; four in a line needed to win.

3D Tic Tac Toe

Biocal Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Challenge the computer in a game of Tic-Tac-Toe. Played in 3 dimensions on a 4x4x4 grid.

5 2K Games

Timeworks, Inc. **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000
Spider Sam: Try to climb the building without falling off. Artist: Draw your own pictures and save them on tape. Labyrinth: Find your way through the maze. Mine Field: Locate the land mines. Galactic Scout: Find your way through the meteors, then battle the enemy to save the galaxy. Full graphics and various skill levels in each game. 2K.

2K Games Pack

JRC Software **Date:** 1984 **Price:** \$1.00 **Platforms:** TS 1000
Key game, Quick lander, I got a bad feeling bout this, Etchsketch, Sines.

2K Games Pack

International Publishing & Software Inc **Date:** 1982 **Platforms:** TS 1000
Snail, Advice, Dice, 31, Sketch and Reverse.

2K TREK

Human Engineered Software **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000
Strategy game in distant galaxies. Command your starship against the Kutar Empire and save the United System. 2K.

3 Games

OCH Jr. **Date:** 1982 **Price:** \$6.00 **Platforms:** TS 1000
16K.

3 Trivia Quizzes

Crystal Coast Software **Date:** 1986 **Price:** \$19.95 **Platforms:** TS 1000

3-D Graphics Game

Roman F. Beck **Date:** 1984 **Price:** \$12.99 **Platforms:** TS 1000
Fight goblins, phantoms and find gold daggers. Infinite dungeon levels.

3-D Worm Maze

PleasanTrees Programming **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
You attempt to net animated worms loose in corridors of seemingly endless identical boxes. You must put each in an empty box. Most boxes already contain a worm which escapes upon checking. By memorization you gradually put all away. 16K.

Software

5 Fun ‘N’ Games

PleasantTrees Programming **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
50 States: Teaches states, capitals, spelling. Mini-Boggler: Vocabulary building game (like Scrabble), 2-4 players. History I: Quizzes people, places, dates (1600s-1870s). History II: Like History I (1870s to present). ZXAK-Man: Arcade game fun. 16K.

5 Games

Ken Doggett **Date:** 1983 **Price:** \$1.95 **Platforms:** ZX81, TS 1000
Game package includes: Starfighter, Sector Attack, and more. 1K.

6 Games

Lacrosse **Date:** 1984 **Price:** \$20.95 **Platforms:** TS 1000
Resistor, Microworm, Paq’Em, Master-Logic and two word games.

6 Programs

Blaine Geddes **Date:** 1983 **Price:** \$11.00 **Platforms:** TS 1000
Checkers, Invaders, Towers, Road-race, Blackjack, Lunar Lander. 16K.

6 ZX81 Programs

R. Howard **Date:** 1982 **Price:** \$4.00 **Platforms:** ZX81, TS 1000
Hangman, NIM, dice plot simulator, craps, prime generator and factor extractor. 1K.

6-Shooter

Biocal Software **Date:** 1983 **Platforms:** TS 1000
A game of skill in which you try to hit a randomly moving target. 5 levels of difficulty.

7 Games Cassette

New England Software **Price:** \$14.95 **Platforms:** TS 1000
Mastermind: Up to 6 players can play any difficulty up to 5 out of 9. Doublemind: Challenging. Slot Machine: Correct probabilities and nice graphics. Craps: Nice graphics. Tic Tac Toe: Challenge the com-

puter with 3 levels of play. Sub Rescue: Save the sub. White Hot Number. 16K.

7 Games for the ZX80 and MicroAce

New England Software **Price:** \$11.00 **Platforms:** ZX80, MicroAce
Mastermind, Doublemind, Slot Machine, Craps, Tic Tac Toe, Sub Rescue, White Hot Number. 1K.

7 Games Pack

Game Room, The **Date:** 1983 **Price:** \$6.00 **Platforms:** ZX81, TS 1000
Blind luck, pop the bubbles, more. 1K.

747 Flight Simulator

Bob Swoger **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 2068
Requires Spectrum ROM.

8-Ball

Biocal Software **Date:** 1983 **Platforms:** TS 1000
Call your stroke, cue-angle, and object ball angle. The computer calculates all subsequent angles.

A Night in Las Vegas

Lamo-Lem **Date:** 1983 **Price:** \$9.95 **Platforms:** ZX80, MicroAce
Craps, Blackjack, Roulette and Slot Machine. All four games on one cassette, with manual, miniature layouts, chips, and full color keyboard overlays. 1K.

Acey Ducey

SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Graphic card game. Ante, get two cards, bet whether or not the next card falls between the first two.

Acid Rain/Missile Alert

Chris Taraba **Date:** 1982 **Price:** \$14.00 **Platforms:** TS 1000
Graphic, machine code games. 16K.

Action-Pak

ROMPAK **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Time Blasters and Mazeball on ROM.

Adder

Panda Software **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Shoot the numbers as they pass across the screen.

Adults Only!

W S M Entertainment **Date:** 1982 **Platforms:** ZX81, TS 1000
The guessing game for wives and other lovers. Comes in a plain brown wrapper. Rated PG.

Adventure 1

ABERSOFT **Date:** 1982 **Price:** \$17.95 **Platforms:** TS 1000
Based on the original game by Crowther, this game was the start of the Adventure craze. 16K.

Adventure A: Planet of Death

Artic Computing **Date:** 1981 **Price:** \$20.00 **Platforms:** TS 1000
In this machine code program you find yourself stranded on an alien planet. On this planet you will meet various hazards, including aliens, little green men, some natural - some not. Your aim is to escape this planet by finding your captured and disabled space ship. You really are the commander of your computer.

Also known as Planet of Fear (International Publishing and Gladstone Electronics). 16K.

Adventure B: Inca Curse

Artic Computing **Date:** 1981 **Price:** \$10.50 **Platforms:** TS 1000
In this adventure you find yourself in South America in the jungle, near an as-yet-undisturbed Inca temple. Inside this temple you will find lots of treasure, your aim is to get out with as much treasure as you can. Beware, do not let greed be your downfall. Your adventure is complete when

Software

you have returned to the jungle clearing with treasure. 16K.

Adventure C: Ship of Doom

Artic Computing **Date:** 1981 **Price:** \$10.50 **Platforms:** TS 1000
While on reconnaissance in space, your ship has been drawn by a graviton beam towards an alien cruiser. Fred, your pet android, informs you that the cruiser is on a humanoid slave mission. Its mission is to seek out humanoid planets from which the inhabitants are taken as slaves and their brains replaced by micro-chips! Your aim is to escape alive having broken the GRAVITON hold on your ship. Fred will stay with you and assist you.

Also known as Ship of Death (International Publishing) and Alien Space Ship (Gladstone Electronics). 16K.

Adventure Cassette

J. Schwitalla **Date:** 1981 **Price:** \$6.95 **Platforms:** ZX80
Dragonslayer, Lunar Landing. 1K.

Adventure D: Espionage Island

Artic Computing **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
You have to survive an engine failure while flying over an apparently uninhabited island in the South Atlantic. Learn to treat the natives with respect, avoid capture and have the enemy and return with the island secret.

Adventure Game

Adventure Games **Date:** 1982 **Price:** \$9.00 **Platforms:** TS 1000

Adventure in Space

Steve Dinstbier **Date:** 1983 **Platforms:** TS 1000
Survive the trials of space travel; all text adventure; first in a series.

Software

Adventure to Korvas (Voyager II)

Horizon Simulations **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Like the World of Sangrel but you have a map display at the top of the screen. 16K.

Adventure Writing/Deathship

AARDVARK **Price:** \$3.95 **Platforms:** TS 1000

Fourteen pages of detailed instructions how to write your own adventures. It contains the entire text of Deathship. 16K.

Adventures in Artificial Intelligence

Harthun Engineering and Research **Date:** 1982 **Price:** \$8.95 **Platforms:** TS 1000

Life forms created range from simple “reflex” creatures to those capable of “learning” and “killing”; entire “communities” are set up. Machine code for fast action. 16K.

African Pilot

Hensley & Associates **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Mixes adventure and business: You battle jungle to keep plane/profits up.

Ahamur

Maranatha **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

Rule your own island nation. Feed the people, plant and harvest, collect taxes. Can you rule? Or will you starve everyone? 9 skill levels. 16K.

Air and Sea Attack

Original Software **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000

Planes and ships are attacking. Stop them with missiles before they arrive.

Air Attack

Intercomputer, Inc. **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000

You are a bomber pilot in command three bombers. You are attacked by the battleship and a hidden missile launcher in

the port city. Your only chance of survival is to destroy the battleship and city. You lose when all three of your bombers are destroyed. 16K.

Air Traffic

MicroSync Software **Date:** 1983 **Price:** \$4.00 **Platforms:** TS 1000

Try to dodge the oncoming planes and buildings. Many levels of play. Keeps score. 2K.

Air Traffic Control

Powerplay Systems **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000

Meet the challenge of up to 24 aircraft speeding across your screen to 5 different destinations. No “safe” altitudes — every plane is your responsibility. You must identify type, heading and altitude and skillfully guide them through crowded airspace, while a real-time clock builds the pressure. Aircraft, ranging from a Cessna 152 to new Boeing 767, enter your airspace, whether you are ready or not. Over 3K of machine code means immediate response.

Airline

Data-assette **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Make enough money to take over British Airlines. You are required to decide on the number of aircraft to operate, buy or charter, staffing, maintenance, fuel supply, loans, taxes, strikes, cancelled flights, hi-jacks and crashes. 16K.

Airplane

Amanda Systems **Price:** \$12.95 **Platforms:** TS 1000

Instrument flight simulator program. VOR-DME-ADF radios. Map display. Multi-leg, ILS approach. 16K.

Alien

Personal Software Services **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

You are on a space ship hunted by deadly aliens. You must choose the right weapon and kill it before it kills you. 16K.

Alien 8

Curry Computer **Price:** \$15.95 **Platforms:** ZX Spectrum

Alien Destroyer

R. H. Enterprises **Date:** 1982 **Price:** \$6.00 **Platforms:** ZX81, TS 1000 1K.

Alien Intruder, Hieroglyphics

Data-assette **Date:** 1982 **Price:** \$10.25 **Platforms:** TS 1000

In Alien Intruder, you are the only survivor on the Explorer Class III star ship. Try to escape before you fall victim to the alien monstrosity that destroyed the crew. In Hieroglyphics, you must decode the ancient 39-symbol alphabet in them to save a famous explorer. 16K.

Alien Invasion

Softsync, Inc. **Date:** 1982 **Price:** \$14.95 **Platforms:** ZX81, TS 1000

A dark cloud appears on the horizon and inches towards you. The invasion is on and they fire, blowing away bits of your shields. You thrust left and right, avoiding bombs while you knock the invaders off one by one. But they inch closer, thirteen rows, seven to a row. Can you get them before they reach your base? 16K.

Alien Rain

Prism Microproducts **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Rescue the extra-terrestrial while avoiding the bombs falling from above. 16K.

Alpha Base

Micrografix **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000

Command your spacecraft from orbit to “Alpha Base” and return. 16K.

Alphabet Soup & Numbers Up

SynCMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Two games: one uses letters, other uses numbers. Arrange letters or numbers

Software

in correct order; pieces move using arrow keys. 16K.

Amazing

Biocal Software **Date:** 1983 **Platforms:** TS 1000

Can the mouse reach the cheese before that cat catches it? Watch the mouse travel through the maze.

Anagrams

Mindware, Inc. **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000

Try to put the scrambled words back in order.

Anagrams

Isthmus **Date:** 1984 **Price:** \$5.95 **Platforms:** TS 1000

Timed word puzzle for 2 to 4 players.

Android

Crystal Microsoft Ltd **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Retrieve the S.S.R. from the alien androids. Get past the interceptors, destroyers, and then George. 16K.

Androids

Timex Computer Corporation **Model:** 06-4001 **Author:** Peter Aked **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 2068

Maze/shoot 'em up for one player. Travel through the maze to find the exit, avoiding androids that try to kill you. Your laser holds seven shots and your shield can stand five hits. Both of these can be recharged by walking over special squares, blue patterned ones recharge the laser and red patterned ones recharge the shield. Also in the maze are doors, represented by cyan colored squares. The player can pass through these but the androids cannot.

Androids (cart)

Timex Computer Corporation **Model:** 07-4001 **Author:** Peter Aked **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 2068

Software

Maze/shoot 'em up for one player. Travel through the maze to find the exit, avoiding androids that try to kill you. Your laser holds seven shots and your shield can stand five hits. Both of these can be recharged by walking over special squares, blue patterned ones recharge the laser and red patterned ones recharge the shield. Also in the maze are doors, represented by cyan colored squares. The player can pass through these but the androids cannot.

Animal Quiz

P & B Software **Price:** \$9.95 **Platforms:** TS 1000 16K.

Antropuss

JPR Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000 Antropuss is a man eater living in a cave of 20 rooms each with 3 tunnels. You must move from room to room avoiding the antropuss and other hazards. You win by shooting the antropuss with one of your 5 arrows.

Appolo

Just Games **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000 Man the missile station and blast the enemy out of the sky. Full defensive arsenal at your command. 16K.

Aquaplane

Quicksilva **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068 Ski through marine maniacs but beware of the rocks, the regattas, the speed boats, and most especially the Great White Hungry.

Arcade Fun

Compuwiz Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000 Three arcade-style game, moving graphics. Escape: Get as many points as possible before the closing walls crush you. Snake: Devour points, leaving a tail over which you cannot cross. Trap: Two players are set against each other. 16K.

Arcade Games Package

Florida Creations **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000 Tank Zap: Tanks appear on the screen and you must get them before they get you. Tic Tac Toe: It is you against the computer in this classic game. 16K.

Ardennes: Battle of the Bulge

Sharp's **Date:** 1986 **Price:** \$19.95 **Platforms:** TS 2068 In a desperate attempt you have to break through the Allied lines, inflict heavy losses and capture as many towns as possible to prevent the Fall of the Third Reich.

Armegon

Lamb's Software, The **Date:** 1982 **Price:** \$6.00 **Platforms:** TS 1000 You defend a space fortress against the Zardax invaders. You are permitted the use of up to five laser cannons, each with three shells. Invaders hit at longer ranges give higher scores. Running totals of shots, hits, score, and best score are kept. Invader strategy is selectable. 16K.

Around Europe in 80 Hours

International Publishing & Software Inc **Date:** 1982 **Price:** \$11.95 **Platforms:** TS 1000 You are in your club in London, where you have just had a blazing row with Sir Roger Partington-Smythe and accepted a wager of \$20,000 against your traveling around Western Europe and obtaining a souvenir from the capital cities within 80 hours. 16K.

Art and Fun

A. Parsons **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000 Six programs: Noughts and Crosses, Battleships and Board Game. Sketch Pad: Allows the user to draw a picture, copy it if a printer is connected, record it to play again, and watch it re-draw the picture. Plus two fascinating pattern generators. 16K.

Artificial Flight Program

Greg Keller **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000 Fly your private plane to the runway and land safely or find out why you crashed and try again. Graphics real time; three separate displays. 16K.

Artificial Intelligence Program

Dynabyte **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000 Converse with ZX81/TS 1000. 16K.

Artillery

Biocal Software **Date:** 1983 **Platforms:** TS 1000 Protect your hometown from enemy planes. Variable gun angles, limited ammo, so aim carefully.

Artillery

JPR Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000 Hit a target down range. Range given in miles; you enter bullet velocity and angle of elevation. Points depend on distance of hit from target. Trajectory visible. 4 levels of difficulty.

Assassin

Steve Karash **Date:** 1981 **Price:** \$5.00 **Platforms:** ZX80, MicroAce 1K.

Assault on Darccos

A.T&A Compu-U-Ware **Date:** 1983 **Price:** \$7.97 **Platforms:** TS 1000 6K and 16K versions.

Asteroid

EZRA GROUP II **Date:** 1983 **Platforms:** ZX81, TS 1000 Listing. 1K.

Asteroids

Integrated Data Systems **Date:** 1983 **Price:** \$10.30 **Platforms:** TS 1000 Destroy incoming asteroids. Rotate, thrust and fire. 16K.

Software

Asteroids

Software Farm, The **Date:** 1982 **Price:** \$14.95 **Platforms:** ZX81 Faithful implementation of the arcade game. Up to four players.

Asteroids

DK'tronics **Date:** 1982 **Price:** \$8.91 **Platforms:** TS 1000 High resolution machine language implementation of the arcade game. Requires Kayde's 4K High Resolution Graphics ROM.

Astro 1000

Southern Computer Systems **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Astro Blaster

Quicksilva **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068 Space shooter inspired by Galaxian.

Attack Force

Computer-Wear Software **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000 You command a colony in hostile space via an armed mobile tank. The planet's defense shields snap on. You are being invaded! Mobility, anti-matter rockets, shields and computer vs. photon torpedoes teleportation, and impact bombs. Can you hold off the invasion while planetary shields charge to full power? 16K.

Autochef

Data-assette **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000 Make enough profit to take over Trust House Forte in the shortest possible time. From information supplied decide on which type of outlet to operate, the price of the menu, whether to enter into loan contracts or purchase consignments of food or wines and the level of advertising, wages, and dividends. Decisions influenced by levels of inflation. Also sold as "Restaurant." 16K.

Software

Avenger

Abacus Electronics **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

Side-scrolling arcade game similar to Defender. Destroy oncoming missiles, bombs and the city below to stake your claim. 16K

Aztec Gold

Horizon Simulations **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Encounter mummies and other weird things in the temple of Tikhun in your search for gold. 16K.

B-1 Nuclear Bomber

Avalon Hill Game Company **Price:** \$16.00 **Platforms:** TS 1000

A nail-biting solitaire simulation of a manned B-1 on a mission over the Soviet Union. Your plane is equipped with six Phoenix Missiles, one megaton warhead and order to retaliate.

B-29 Bomber

E & S Software **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

Your mission is to destroy the enemy tank. Two game options: moving and non-moving tanks. 16K.

Bac-Trac

Lamb’s Software, The **Price:** \$5.00 **Platforms:** TS 1000

A Pac-man style game with a “dot eater” and “ghost trackers.” 54 initial game setups are possible with choices of playing maze design, energy pills, and dot density. Arrow keys move your man and a running score is kept as well as a best score for this load. 16K.

Backgammon

Hewson Consultants **Date:** 1983 **Price:** \$13.00 **Platforms:** TS 1000

Graphic display of the board, stones and tumbling dice. Several variations. Single game points series: a number of games are played in succession, the winner being the one with the most points. Gambling series: the computer and you start with £200

each and both put a £10 bet on at the start of a game, which can be increased during play. The game incorporates all the normal rules of backgammon. 16K.

Backgammon

Biocal Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

Full-screen graphics, break disabled, 100% machine code, clean loading, smart play, top rating from TSUG review, multi-game scoring, cube doubling, simple operation, documentation included.

Backgammon and Dice

Timex Computer Corporation **Model:** 03-4001 **Author:** Psion **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Great for beginning players. If one player tries to perform an illegal move, the screen prints out an explanation of why it is illegal. Columns are marked with letters, beginning at A on the upper right. It has four levels and a doubling cube. 16K.

Badgammon

Foote Software **Price:** \$12.95 **Platforms:** TS 2068

Bandit

Biocal Software **Date:** 1983 **Price:** \$2.00 **Platforms:** ZX81, TS 1000 1K.

Bank Raid

Sourceware, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Lure gunmen away then run for the bank before they gun you down.

Bar-Dice

Biocal Software **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000

Variation of Yahtzee.

Barricade

Small System Software **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000

Break through the 5-wall barricade with the high-speed ball and keyboard controlled

Software

Battlestar Xemit

VP Hosey **Date:** 1988 **Price:** \$9.00 **Platforms:** TS 2068

Defend the fleet against suicide attack fighters of the Denebola System. Nine levels of play where skill and tactics determine success and survival. User defined graphics with special color and sound effects in a fast-action arena.

Beat the Maze

R. H. Enterprises **Date:** 1982 **Price:** \$6.00 **Platforms:** ZX81, TS 1000 1K.

Best of Arcade Games

Byte Power **Date:** 1988 **Price:** \$19.00 **Platforms:** TS 2068

Best of Strategy and Board Games

Byte Power **Date:** 1988 **Price:** \$19.00 **Platforms:** TS 2068

Bigflap Attack

Timex Computer Corporation **Model:** 03-4007 **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Defend yourself against the giant birds. 10 levels of play. 16K.

Bingo

Walter Grundy **Date:** 1983 **Price:** \$4.00 **Platforms:** TS 1000

Random number plus letter combinations generated. All previously called combinations displayed. Listing. 16K.

Bio Rhythm

CAI Instruments, Inc. **Price:** \$7.95 **Platforms:** TS 1000

Bio-Rhythms

LAKAR **Date:** 1984 **Price:** \$6.75 **Platforms:** TS 1000

Know your critical days and good days. 30 day plots. 2K and 16K.

paddle. Trap the ball among the walls and watch it destroy the 100 blocks. 16K.

Baseball

Gerald “Jerry” Bennett **Date:** 1983 **Price:** \$25.95 **Platforms:** TS 1000

Select pitchers and batting order for any major league team. Seven categories of player statistics are used to determine outcome. Includes full scoreboard and playing field. Plays include singles, doubles, triples, home runs, walks, errors, steals and much more.

Basic Basic

2-Bit Software **Model:** TS12 **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000

Learn to write your own computer games. Screen display, keyboard input, moving graphics, loops, editing and other programming techniques. Includes program tape, workbook and blank tape. 2K.

Basketball

R. H. Enterprises **Date:** 1982 **Price:** \$6.00 **Platforms:** ZX81, TS 1000 1K.

Bat Cage

Timex Computer Corporation **Model:** 02-4004 **Author:** Thomas Burke **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Catch the egg and put the bat in the cage. Then fight off the other bats trying to rescue the caged bat. 36 levels of play. 2K.

Battleship

Isthmus **Date:** 1984 **Price:** \$7.95 **Platforms:** TS 1000

Naval strategy game for two players. 16K.

Battleships & Cruisers

JRS Software **Date:** 1982 **Price:** \$9.90 **Platforms:** ZX81

Play against the computer to destroy its battleships, cruisers and destroyers. 16K.

Software

Biomate
Syber, Inc. **Date:** 1983 **Price:** \$15.95
Platforms: TS 1000
Plot biorhythm life cycles and chart compatibility with others. 16K.

Biorhythms
EZRA GROUP II **Date:** 1982 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
Results for any date. Listing, 1K.

Biorhythms
J. M. Yocum **Date:** 1983 **Price:** \$2.00
Platforms: TS 1000
Program listing.

Biorhythms
Sight & Sound Electronics **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
Computes and plots three of your ever changing life functions for any time after your birth. 16K.

Biorhythms
ORBYTE Software **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Plots physical, emotional and intellectual rhythms, based on birth date. 16K.

Bird Cage
Skelly Computing **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Put your life savings in the Bird Cage and try your luck. Exciting game with excellent graphics.

BIZ
Curry Computer **Date:** 1985 **Platforms:** TS 2068
Home management program that goes a long way towards proving that fancy features are not limited to the big computers.

Black Crystal
Software Supermarket **Date:** 1982 **Price:** \$22.00 **Platforms:** TS 1000
Adventure game. 16K.

Black Holes
JRS Software **Price:** \$2.95 **Platforms:** ZX81
Your starship is in an unknown galaxy consisting entirely of black holes which threaten to swallow you. Your skill at the controls and your ability to look and think many moves ahead is the only thing that stands between you and destruction. 16K.

Black Holes/Link Up
Aries Associates **Date:** 1982 **Price:** \$12.00 **Platforms:** TS 1000
In Black Holes, navigate your starship through gravitational fields of four black holes to reach your home planet safely. a new situation every time. Launch your shuttle and control rocket burns to link up with SkyLab in Link Up. Actual simulation of gravitational fields, true elliptical orbits, display of orbital parameters, and choice of display modes. 16K.

Black-Jack-Pak
ROMPAK **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Up to four players. Split, double-down, insurance, 5-card Charlie on ROM.

Blackjack
International Publishing & Software Inc **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Blackjack at its best. Blackjack as it played in the casinos of Nevada. Up to five players can play against a dealer with a fifty-two card deck. Split pairs, double down, and even buy insurance. The deck is reshuffled only when needed — allows for a continuous game. Your winnings and losses are displayed after each hand. 16K.

Blackjack
Dynacomp, Inc. **Date:** 1984 **Price:** \$12.95 **Platforms:** TS 1000
16K.

Blackjack
Peak **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000
Practice your strategy. Hit stand, double down, split and take insurance with this Nevada casino game. Deals out a complete deck before shuffling. 16K.

BlackJack
New England Software **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
Play against the computer. Dealer stays on 17 or above, hits on 16 or less. Player can stay, hit, split pairs, or double down on 10 or 11. Graphic cards displayed. Computer tallies your money total. 16K.

Blackjack
Biocal Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Multi-player, multi-deck version of popular 21 card game. Sharpen your skills for Las Vegas/Reno.

Blackjack
Sikes Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Casino blackjack at its best. Take your \$500 bankroll and put your luck to the test. Full graphics display of cards makes this game fun and exciting. 16K.

Blackjack
JPR Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Game of 21 played with 52 cards. Computer shuffles and deals. Object is to get 21. You may draw additional cards. 16K.

Blackjack
I. M. S. Enterprises **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Las Vegas rules apply, with computer holding all bets. Allows splitting pairs, doubling down and insurance. Up to six players. All hands displayed simultaneously. 16K.

Software

Blackjack for Winners
Scitech Software **Date:** 1983 **Price:** \$27.95 **Platforms:** TS 1000
Use this professional blackjack game to master the fundamentals used by experts to win consistently. Remove the guesswork from hit/stand, double-down and split decisions. Comes with Blackjack Your Way to Riches.

Blackjack Master
Instant Software **Price:** \$19.95 **Platforms:** TS 1000
Play the blackjack rules of any major casino in the world. Shuffles up to six standard 52-card decks. Keeps track of all wins and losses. Accommodates up to seven players against the house. Calculates six different point counts. 16K.

Blackjack Tutor
UAS **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
Prepare for your trip to the casino tables. Let your computer aid you and be your tutor. This program provides you with drill and strategies that should help keep the odds in your favor at the gaming tables. 16K.

Blackjack * Master
ZETA Software **Author:** Robert Foley **Price:** \$19.95 **Platforms:** TS 1000
Up to 7 players with casino options like double down, split pairs, surrender, sit out, and more. 16K.

Blind Alley
Timex Computer Corporation **Model:** 06-4021 **Author:** Simon Lane **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 2068
Tron light-cycle-inspired game. Outer space action in which the object is to lead the opposition spaceships down a “blind alley” without getting your ship “boxed” into a corner. Progressive action increases the number of opponents from two to six, requiring “out-of-this-world” decisions and reflexive actions.

Software

Boggier
PleasanTrees Programming **Date:**
1983 **Price:** \$9.95 **Platforms:** TS 1000
For two to four players. 16K.

Bomber
Mikro-Gen **Date:** 1982 **Price:** \$7.95
Platforms: TS 1000
Shoot and bomb your way out of trou-
ble before you crash. 16K

Bomber
Biocal Software **Date:** 1983 **Platforms:**
TS 1000
Maneuver your bomber through anti-
aircraft flak to drop your payload over the
target; fuel limit. 16K

Bomber
MicroSync Software **Date:** 1983 **Price:**
\$3.00 **Platforms:** TS 1000
Target practice game in which you try
to hit a target on the bottom of the screen. 2
types of missiles, one bomb. Target ex-
plodes when hit. 16K.

Bomber
Prism Microproducts **Date:** 1983 **Price:**
\$9.95 **Platforms:** TS 1000
You must land, but not before all alien
life forms are neutralized, before they neu-
tralize you. 16K.

Bon Mot
GOTWALD **Date:** 1982 **Price:** \$9.99
Platforms: TS 1000
Anagram/crossword game for 1 to 6
players. 16K.

Bong
Biocal Software **Date:** 1983 **Price:**
\$5.00 **Platforms:** TS 1000
Throw dice until you reach 10,000
points. 1s and 5s are scoring dice. Up to 5
players. 16K.

Bouncy
Infinity Research Development **Date:**
1982 **Price:** \$7.95 **Platforms:** TS 1000
Fight off mad scientist Count Von Der
Bouncy’s bizarre creations known as sno-
gel balls and regain your freedom. 16K.

Brainteasers
Dunrobin Software **Date:** 1983 **Price:**
\$15.00 **Platforms:** TS 1000
Three games: match game (or Nim),
dice roll, and the old English pub game
“close the box”. 16K.

Break-Out
Lamb’s Software, The **Date:** 1982
Price: \$6.00 **Platforms:** TS 1000
A game of bouncing balls, walls, and
paddles. A choice of three different paddle
sizes is provided as well as a choice of
paddle movement. An additional variation
allows the player to have randomized tar-
gets as well as the “breakout walls.” 16K.

Breakout
Macronics **Date:** 3/1/1981 **Price:**
\$20.00 **Platforms:** ZX80
Uses the Amazing Active Display to im-
plement the game of breakout.

Breakout
Microx **Price:** \$10.00 **Platforms:** TS
1000
Available in joystick version.

Breakout
Mikro-Gen **Price:** \$7.95 **Platforms:** TS
1000

Breakout
Mikro-Gen **Date:** 1983 **Price:** \$14.95
Platforms: TS 1000
Classic paddle/wall game, includes
seven bat angles to increase difficulty. Sup-
ports Mikro-graph joystick. 16K.

Breakout
Personal Software Services **Date:** 1983
Price: \$14.95 **Platforms:** TS 1000
Similar to the arcade game. 16K.

Brian Bloodaxe
English Micro Connection **Date:** 1985
Price: \$9.50 **Platforms:** TS 2068, ZX
Spectrum
Brian Bloodaxe has landed on the
shores of Britain in his viking longboat. His
first quest is to become ruler of the land by
finding the crown jewels and sitting on the
throne while wearing them.

Brickbats
T-S Systems **Date:** 1983 **Price:** \$9.00
Platforms: TS 1000
Combines the features of Breakout and
Maze Chase games. You place bats on the
screen to destroy randomly placed bricks,
but each bat stays where you put it. Soon
the entire screen will be filled with a maze
of bats, showing hypnotic patterns. At the
end you find the number of bats used and
the time you spend in your game. 2K.

Bridge
International Publishing & Software Inc
Date: 1983 **Price:** \$14.91 **Platforms:**
TS 1000
Improve your playing and bidding. Ad-
justable skill level, one to four players. 16K.

Britain Invaded!
Sharp’s **Date:** 1986 **Price:** \$19.95 **Plat-**
forms: TS 2068
Defend England in this hypothetical in-
vasion during World War II. Effects of rail
lines, weather, terrain and ports, Scrolling
map, multiple attacks. Every invasion is to-
tally different to which German divisions are
used, where they land, and depending on
weather how many reinforcements they get
and to which port. Program uses 231 user
defined graphics.

Bugaboo the Flea
Curry Computer **Date:** 1983 **Price:**
\$9.95 **Platforms:** TS 2068
You play the part of a flea trapped in a
colorful cave full of wild and exotic vegeta-
tion.

Software

Bulls and Cows
Computer Software Associates **Date:**
1983 **Price:** \$9.95 **Platforms:** ZX81,
TS 1000
Game of concentration. Computer ran-
domly chooses 4 numbers. You must deci-
pher the “master set” exactly. When you
enter your guesses, the computer will tell
you how many of the chosen numbers
match the set, and how many match in ex-
act order. 1K.

Bumpapak-25
Bug-Byte Software **Price:** \$29.00 **Plat-**
forms: ZX80
25 programs for the unexpanded ZX80
on 3 cassettes. These are made up from
the best of our cassettes 1-8, and include
biorhythms, moon-landing, hangman, ZX80
art, stopwatch, treasure hunt, battleships
and many others complete with instruc-
tions.

Business Logic
Savage Software **Date:** 1982 **Price:**
\$14.95 **Platforms:** TS 1000
16K.

Bust Out/Loco
SyncMaster **Date:** 1983 **Price:** \$14.95
Platforms: TS 1000
Fast action video game for one or two
players. 16K.

Can of Worms
Automata Ltd **Date:** 1982 **Price:** \$10.00
Platforms: ZX81, TS 1000
Acne, vasectomy, smut, Hitler, dole,
royal flush, Reagan and P’s n Q’s. 1K.

Card Cut
EZRA GROUP II **Date:** 1983 **Price:**
\$1.00 **Platforms:** ZX81, TS 1000
Listing. 1K.

Carver
Ultimate Blackwood, The **Date:** 1983
Price: \$22.00 **Platforms:** TS 1000
16K.

Software

Casino
Steve Dinstbier **Date:** 1983 **Price:** \$4.00 **Platforms:** TS 1000
Craps, money boxes, in-b-tween, 1-6, slot machines, and horse racing.

Casino 1
Timex Computer Corporation **Model:** 06-4004 **Author:** Ray Leninger **Date:** 1984 **Price:** \$15.95 **Platforms:** TS 2068

Casino 1 (cart)
Timex Computer Corporation **Model:** 07-4004 **Author:** Ray Leninger **Date:** 1984 **Price:** \$15.95 **Platforms:** TS 2068
High roller casino action games let you play 21, “craps” or the slots. An initial betting stake gives you the chance to “break the bank” or “lose your shirt.”

Casino 1 was listed as an “Insta-load™ Cartridge” in the Winter 1983 catalog; all other TS 2068 cartridges are listed as “Command Cartridge™.”

Casino Blackjack
Thomas H Nooter **Date:** 1983 **Price:** \$7.50 **Platforms:** TS 2068
Practice card-counting skills before you gamble. Up to 6 players, 6 “real” decks, keeps track of stake, split, double-down, buy insurance.

Casino Fun
Compuwiz Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Comprehensive Blackjack game follows full casino rules such as double down, split a hand, etc. Hi-lo is derived from the popular English game. Excellent graphic displays are used in both games. Watch the “chips” go up and down as your winnings fluctuate. 16K.

Casino Fun II
Compuwiz Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Play the exciting game of Baccarat as it is played in European casinos. Graphics

display of cards, messages, and chips. Memory challenges and develops your ability to recollect. 16K.

Casino Keno
Macshak Software **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 1000
Like the Las Vegas casinos. 80 number display board. Players mark their tickets, selecting from 1 to 12 numbers; computer randomly selects and displays 20 numbers. Winner payoffs displayed on command; odds used are those of the casinos.

Casino: Four Games
Savage Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Poker Machine: 4 spinning reels of slot machines. Sudden Dice allows friendly wagering. Five Cards: reveals both poker hands retaining betting totals. Chuckluck: Bets \$5 on the roll of the dice. 16K.

Casino/Stockmarket
Infinity Research Development **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Play the slot machines, keno, roulette, blackjack, and more right in your own living room/then see how well you can deal in the stock market. Be a millionaire in one night. 16K.

CasinoPak 1
Reston Publishing Company **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
One-arm bandit and blackjack. Play against the computer. 16K.

Cassette 1
Tensor Technology **Price:** \$10.00 **Platforms:** ZX80
Slot machine, Robot fight, Corporation, Tank Battle. 1K.

Cassette 2
Tensor Technology **Price:** \$10.00 **Platforms:** ZX80
Lucky Lindy, Crop duster, Nuke em, Carrier lander. 1K.

Cassette 50
Cascade Software **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
50 different games for the TS 1000/ZX-81. 39 games will run in 1K, the other 11 with 16K. Games include “Radar Landing” (flight simulator) and “Psion Attack”. Logical, tactical, maze, and arcade games are all included. 16K.

Cat and Mouse
Biocal Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Two cats chase a mouse through a maze. You control the mouse to score on its way to the cheese.

Caterpillar
Beacon Electronics **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000, TS 2068
Arcade game.

Cauldron
English Micro Connection **Date:** 1985 **Price:** \$8.50 **Platforms:** TS 2068, ZX Spectrum
Fly across the land searching for the keys to the underworld, avoiding bats, evil bouncing pumpkins, carnivorous plants and nasty creatures.

Cave In
SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Escape from spiral before it collapses. Each round progressively more difficult.

Cave of Destiny
D. Ernst **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Plays like many of the popular role playing games except that the computer is the game administrator. Includes instruction booklet and dice. 16K.

Cave of the Word Wizard
Timeworks, Inc. **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000
On a routine mineral survey of the Planet Spolig you stumble into a mysterious unexplored cave. If your oxygen runs out,

Software

you will join the Wizard’s bone collection. The Wizard will confront you and give you a word. You must determine if it is spelled correctly or not. When you are right, the Wizard gives you more oxygen, but beware for he has many challenges and obstacles for you. 3-D graphics, 3 skill levels, ages 10 up. 16K.

cen-TIC-pede
JRC Software **Date:** 1984 **Price:** \$4.95 **Platforms:** TS 1000
Machine code action. Multiple levels, extra large characters.

Centipede
Frog Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Just like the video-game. Uses machine code for fast action. Record high scores. Kill the centipedes and other insects before they kill you.

Centipede
DK’tronics **Date:** 1982 **Price:** \$11.90 **Platforms:** TS 1000
High resolution machine language implementation of the arcade game. Requires dk’Tronic’s 4K High Resolution Graphics ROM. 16K.

Challenge I
Micromega **Date:** 1983 **Price:** \$9.95 **Platforms:** ZX81, TS 1000
Four different tests of your skill. Start out driving a race and finish up in a war. 1K.

Challenge I
Arizoftx **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Two games: ‘Code Cracker 1’ and ‘Tic-Tac-Toe’. Variable skill levels. All ages. 16K.

Challenge II
Micromega **Date:** 1983 **Price:** \$9.95 **Platforms:** ZX81, TS 1000
Four different arcade style challenges. 1K.

Software

Challenges from Another Dimension

Panero Software **Date:** 1983 **Price:** \$6.75 **Platforms:** ZX81, TS 1000
Five arcade-action games. Includes Frog-it, Evade, CRON:ZX81 Warrior, Robot Catch and Draw. 1K.

Championship Chess

Reston Publishing Company **Date:** 1983 **Price:** \$19.90 **Platforms:** TS 1000
Try to beat the computer. Won the competition at the Consumer Computer Show in London. Also sold as TimeWare Chess.

Character Generator

Story Software **Date:** 1984 **Price:** \$15.98 **Platforms:** TS 1000, TS 2068
Generate a character for Advanced Dungeon & Dragons in less than a minute.

Character Generator II

Story Software **Date:** 1983 **Price:** \$15.98 **Platforms:** TS 1000, TS 2068
Store and update generated characters for Advanced Dungeons & Dragons.

Chase

Biocal Software **Date:** 1983 **Price:** \$2.00 **Platforms:** ZX81, TS 1000
Steer your interceptor to the target. Arrow buttons control velocity. 1K.

Checkers

Biocal Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Challenge the computer to a game; includes demo game and two player mode. 16K.

Chess

Timex Computer Corporation **Model:** 06-4013 **Author:** Psion **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 2068
Classic Chess match between you and the computer. All legal moves including castling and en passant. High resolution graphics and 10 levels of play are sup-

ported. Special feature lets you set-up the board to study chess strategy.

Chess

Mikro-Gen **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
All legal moves including castling and en passant. High resolution graphics and 6 levels of play are supported. Special feature lets you set-up the board to study chess strategy. 16K.

Chess (cart)

Timex Computer Corporation **Model:** 07-9003 **Author:** Mikro-Gen **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
All legal moves including castling and en passant. High resolution graphics and 6 levels of play are supported. Special feature lets you set-up the board to study chess strategy. 16K.

Chess 1.4

ABERSOFT **Date:** 1982 **Price:** \$17.95 **Platforms:** TS 1000
A full feature chess game offering 10 levels of skill, graphics display and hard-copy via printer. At any time during the game a player can change sides or save the game for future play. 16K.

Chess and Chess Clock

Timex Computer Corporation **Model:** 03-4000 **Author:** Mikro-Gen **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
All legal moves including castling and en passant. High resolution graphics and 6 levels of play are supported. Special feature lets you set-up the board to study chess strategy. 16K.

Chesslab 5.0

Arizoftx **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Analytical and record keeping system for chess players. Displays a chessboard upon which pieces can be moved, eight positions stored and recalled, sixteen commands provide flexibility. Filetape5.0 (in-

cluded) permits storage on tape of six positions per file. 16K.

Chest of Classics

Lamo-Lem **Date:** 1981 **Price:** \$9.95 **Platforms:** ZX80, MicroAce
Four classic computer games for the MicroAce and 4K ROM ZX80. Life, Lunar Lander, Mastermind, K-Trek, all on one cassette with game charts and game manual included.

Chewter

EZRA GROUP II **Date:** 1982 **Price:** \$2.95 **Platforms:** ZX81, TS 1000
Like Pac-Man. Listing, 1K.

Chopper

Just Games **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000
Fire up the engines and take off. Maneuver your helicopter through the treacherous cavern all the way to the enemy base. Dodge the enemies ever constant tank fire, missiles, and other obstacles. The rough terrain of the cavern is enough to challenge even an experienced chopper pilot. 16K.

Circle World

AARDVARK **Author:** Bob Anderson **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Alien culture has built a huge world in the shape of a ring circling their sun. They left behind some strange creatures and a lot of advanced technology. Unfortunately, the world is headed for destruction and it is your job to save it before it plunges into the sun! 16K.

Circuit Board Scramble

Timex Computer Corporation **Model:** 06-4006 **Author:** Ken Frink **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 2068
Have fun and learn about computer components at the same time. Run the friendly bug through the circuit board maze in a race against the clock and at the same time, you'll be able to examine the computer's internal components.

Software

City 2068

C. W. Associates **Platforms:** TS 2068
Adventure game.

City of Xon

Pleasantrees Programming **Date:** 1983 **Price:** \$19.95 **Platforms:** ZX81, TS 1000
Zaxxon for the ZX81/TS 1000. Evil Xon and his forces are on a ridge-top encircling a valley full of his subjects. In this isometric shooter you control a craft moving it up or down, and the aim is to destroy as many of Xon's armaments as you can to reach Xon himself and bring him to justice. You have the choice of two weapons, a disruptor (more powerful) or a phaser, and you have the choice of turning your armor on and off. Moving the craft, using weapons, or having your armor on uses fuel shown by a gauge but fuel can be collected with a grappling hook or turning part of your score into fuel. If you crash or run out of fuel then it is game over. Once you have amassed 300000 points or played for two hours, you have the chance to grapple Xon with your hook. 16K.

Classic Games

Simulusion **Date:** 1983 **Price:** \$9.95 **Platforms:** ZX81, TS 1000
Four games. Lunar Lander: With a readout of altitude, velocity, thrust, and fuel. Dogfight: A get-em-in-your sights action game with 1 second screen updates. Mind-master: Deduce the hidden combination of four symbols. Life: Form a colony and watch the cells grow or die in two second life cycles. 1K.

Code Master

Memory Master **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Solve crypto-quotes stored in memory. Computer can generate a code from material typed by the user; or solve a code from a newspaper, etc. Cursor controlled control panel is used for letter replacement. Hint and quit routines make it easy enough for a 10 year old to master but hard enough for the avid puzzle fan. 16K.

Software

Colditz

Microx **Author:** R. Jones **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
Likely Colditz Castle, published in Computers & Video Games magazine, Nov 83. 16K.

Colonize the Universe

WMJ Data Systems **Date:** 1985 **Price:** \$16.95 **Platforms:** TS 2068
Resource management game in a space colony. Fuel and food are scarce and must be monitored closely. Aliens, black holes, super nova explosions and time warps are abundant.

Combat Flight

Melbourne House **Author:** Grenville Manuel **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
You are the death-defying commander of a sturdy fighter ship, flying through dangerous mountainous terrain, while alien ships are coming after you to destroy you. Even if they do not get you, they may leave behind dangerous flak. You must avoid crashing into the mountains and flying too high. 16K.

Combo

Simplex Software **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000
Computerized variation on popular BOGGLE hidden word game, with 4x5 game board. Two to eight players.

Combo Pak I

Intercomputer, Inc. **Date:** 1983 **Price:** \$14.50 **Platforms:** TS 1000
Return from Space and Missile Launcher. 16K.

Combo Pak II

Intercomputer, Inc. **Date:** 1983 **Price:** \$14.50 **Platforms:** TS 1000
Vegas and Jeopardy. 16K.

Combo Pak III

Intercomputer, Inc. **Date:** 1983 **Price:** \$14.50 **Platforms:** TS 1000
Demolisher and Air Attack. 16K.

Combo Pak IV

Intercomputer, Inc. **Date:** 1983 **Price:** \$14.50 **Platforms:** TS 1000
Guard the President and Submarine. 16K.

Compuball

Compuball **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
Baseball simulation. Use any names you choose. Pit your own team against any opposing team you want. Continuous and complete display, play by play report of score, inning, balls, strikes, outs, men on base, runs scored. 16K.

Computer Boxing

Tri-Soft **Date:** 1984 **Price:** \$12.00 **Platforms:** TS 1000
Match the 25 all-time great heavy weight champions from Sullivan to Holmes. Was Ali better than Louis? Dempsey vs Marciano? Profiles on each boxer make for realism.

Computer Match

CRC Software **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
Concentration. Find your match on the screen. 16K.

Computerized Cowboy

Steve Karash **Date:** 1981 **Price:** \$5.00 **Platforms:** ZX80, MicroAce 1K.

Computurf #1

GF&B Data Research **Date:** 1983 **Price:** \$39.95 **Platforms:** TS 1000
Pick winning horses in races. Claims 87% success rate.

Concentration

American Micro Products, Inc **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000
A computerized version of the game Concentration. The game is played on a board containing fifty spaces. The player matches his memory against the computer

in finding number pairs hidden across the board. 16K.

Concentration

International Publishing & Software Inc **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Concentration: 3 ways to play; match numbers, shapes, or patterns with a friend or the computer. Word Challenge: Modeled after the famous word game Boggle; up to 6 players. Number Challenge: How many numbers can you recall ... backwards? 3 levels; up to 6 players against the computer. 16K

Condition Red

Savage Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Conquest

Lloyd Dreger **Date:** 1993 **Price:** \$19.95 **Platforms:** TS 2068
A strategic, generic war-game for the 2068. As commander of an expeditionary force, your goal is to capture an unknown, inhabited planet.

Cosmic Galaxian Arcade

Dennis Donovan **Date:** 1983 **Price:** \$1.00 **Platforms:** TS 1000
1k game. Listing.

Cosmic Invaders

Southern Computer Systems **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Cosmos

Mindware, Inc. **Author:** Vortex **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000
Convoy in distress. As you send your advanced class starship through hyperspace, you learn that vicious aliens are attacking an unarmed space convoy. Use your laser guns to blast at the enemy, but they fight back with space mines that can penetrate your force field. 16K.

Software

Craps

Bronder Entertainment **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000
A craps game that teaches programming skills. Complete listing; fully documented with rem statements and line by line explanation of the program; bound in 3-hole binder. 16K.

Craps

J.L.K. Software **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000
Graphics game in which you bet on the outcome of the dice. 7, 11, or doubles win bet. Displays giant dice. 2K.

Craps

Biocal Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Bet on the dice rolls. Up to 5 people. 16K.

Craps

JPR Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
2 dice. Computer rolls and adds the points. You bet on the roll. 16K.

Crazy Mazey

2-Bit Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
4 games. Byte Bite:can you avoid the doggy's chomping jaws? Slalom: ski your way through this ever-changing snowy scene. Labyrinth: scatter a few bits along the trail to find your way through 3 mazes. Cat & Mouse: catch your dinner before the cat catches you in this invisible maze.

Crazy 8 and Poker 4

Robert J. Midura **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Two card games. Crazy 8: Displays card in play, 2 keystroke selection of card from deck of 52 to play with options to draw and to peek at computer's hand at any time during game; score keeping. Winner of a hand is dealt to and plays first. 16K.

Software

Crazy Bugs (cart)

Timex Computer Corporation **Model:** 07-4005 **Author:** Steve Hughes **Date:** 29.95 **Price:** \$1,983.00 **Platforms:** TS 2068

You are in a maze in which you must get the eggs laid by the bugs, put them in a box, and exit the maze. Although you are faster than the bugs, they are intelligent and will trap you. The screens increase in difficulty. At the higher levels super bugs join the chase. Converted from the ZX Spectrum game.

Crazy Bugs!

Timex Computer Corporation **Model:** 06-4023 **Author:** Stephen Hughes **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

You are in a maze in which you must get the eggs laid by the bugs, put them in a box, and exit the maze. Although you are faster than the bugs, they are intelligent and will trap you. The screens increase in difficulty. At the higher levels super bugs join the chase. Converted from the ZX Spectrum game.

Crazy Comet

Just Games **Date:** 1983 **Price:** \$9.00 **Platforms:** TS 1000

Global defense mission: Code name: Crazy Comet. Cover the major cities of the world. Be on 24-hour alert for enemy planes and anti-aircraft weaponry. 16K.

Crazy-cards/Cube

CLEVA Computer Ware **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

Crazy-Cards: Learning the rules does not seem to help. Totally addictive for cheats. Cube: Use your computer to solve the mysteries of the Rubik Cube. 16K.

Cribbage

UAS **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

The game follows the standard rules for the game as can be found in any good card instruction book. Two levels of play are available: 60 and 121 points. The computer

will shuffle, deal, and cut for who goes first, generate the up-card, keep track of the score, and credit all points as they are earned. The total card play is displayed and playing prompts are also displayed. 16K.

Croaka Crawla

Quicksilva **Author:** John Field **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000

It's not easy being a frog what with the trucks and toads, the crocodiles and turtles. Frogger clone.

Crossfire

Timex Computer Corporation **Model:** 06-4005 **Author:** Jeff Naylor **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

High-scoring, fast-paced chase game demands that you whiz through the maze without getting caught. Increasing levels of difficulty and great sound effects provide hours of challenge and fun.

Crossword

Mindware, Inc. **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000

Create and play your own crosswords.

Crossword-Puzzler

Brown Cottage Industries **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000

End erasures, smudges. Display and solve crossword puzzles on your TV screen. 16K.

Crown & Scepter

International Publishing & Software Inc **Date:** 1982 **Platforms:** TS 1000

Medieval adventure.

Cruiser

Biocal Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

Navigate your spaceship through a meteor storm. How far can you travel without damage?

Software

Cybird Assault

Quicksilva **Date:** 1983 **Price:** \$22.95 **Platforms:** TS 2068

Alien creatures with cosmic autowings flapping furiously, swoop down to attack your ship in the space void. Dodge the remote control meteors as you desperately fight back with your laser cannons.

Cyborgwars

Stratagem Cybernetics Inc. **Date:** 1982 **Price:** \$14.00 **Platforms:** TS 1000

Simulation of four military-industrial economies locked in a deadly struggle for survival. One to four players compete with each other and/or the computer. Balance of power depends on skill in developing resources, use of espionage, exploitation of alliances and utilization of military potential.

Cycloids

Pegasus Micro Systems **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 2000, TS 2068

Dallas

Data-assette **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Board game of exploitation. Pick out your plots to discover oil, seismic surveys, purchase concessions, drilling rigs, build platforms and pipelines. Can you take over the Ewing empire? 16K.

Damper/Glooper

Quicksilva **Author:** M. P. Crane **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 1000

A grid runner is needed to shut down the power grid of the city as the space leaches attack. A cable cycle is provided; the rest is up to you. Glooper: Pac-Man clone.

Damsel and the Beast

Bug-Byte Software **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000

An adventure game of concentration and suspense. You wander in the darkness dangers of the beast's palace to find the Damsel hiding or imprisoned there, kill the

Software

Beast, get the Damsel out of the palace before she starves to death. 16K.

Day at the Races

Personal Software Services **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Pretend you are at a British race track and win big money. 16K.

Death Chase

Micromega **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068
Patrol your territory night and day, watching for enemy patrols and hostile aircraft.

Deathship Sabotage

Horizon Simulations **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
You must stop the deathship before it reaches the earth in this new adventure. Adventure with a large vocabulary and over 80 rooms of ship to explore. 16K.

Deep Space

Software Development Associates **Date:** 1983 **Price:** \$5.95 **Platforms:** TS 1000
You control a space ship whose mission it is to find and destroy enemy invaders within a section of space. 16K.

Defender

DK’tronics **Date:** 1982 **Price:** \$11.90 **Platforms:** TS 1000
High resolution machine language implementation of the arcade game. Requires dk’Tronics’ 4K High Resolution Graphics ROM. 16K.

Defense Wave

Panero Software **Date:** 1982 **Price:** \$1.50 **Platforms:** ZX81, TS 1000
1K.

Deluxe Computerized Cowboy

Steve Karash **Date:** 1981 **Price:** \$10.00 **Platforms:** ZX80, MicroAce
16K.

Demolisher

Intercomputer, Inc. **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
The object is to demolish a growing wall before it crushes you. Gain points by hitting the correct blocks. Lose points by hitting the wrong ones. This requires a careful strategy. You select the level of difficulty. 16K.

Demolition/Ten-Pin

Reston Publishing Company **Author:** David Nowotnik **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
It’s up to you to stop the moving wall before it reaches the top of the screen. Or, convert your computer into a bowling alley. Your score depends on how hard and accurately you send the ball down the alley. 16K.

Demon Adventure

Prism Microproducts **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Text adventure game with real-time battles that relies on complexity rather than difficulty of play.

Demon-Driver

Mrs. Dan Kurth **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000
Car chase with the user vs. the computer. Fully machine code.

Derby Day

Ron Ruegg **Date:** 1985 **Price:** \$10.00 **Platforms:** TS 2068
Horse race game with built-in parimutuel; prints tickets.

Derelict

AARDVARK **Author:** Rodger Olsen and Bob Anderson **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
For Wealth and Glory, you have to ransack a thousand year old space ship. You’ll have to learn to speak their language and operate the machinery they left behind. The hardest problem of all is to live through it. 16K.

Detention Station Intrag

Turner, Elcy & Com. **Model:** SOA1 **Date:** 1982 **Price:** \$13.95 **Platforms:** TS 1000
The professor’s Beautiful Young Daughter has been captured by the Maltraxians and imprisoned in the dreaded Detention Station Intrag. You must enter this orbital prison, find BYD and free her. Then, most difficult of all, you must escape with her from the alerted station. This is no task for the fainthearted; only you, Bart Trueheart, could even consider such a dangerous rescue.

Devils of the Deep

RAMEX International **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 2068

Diamond Mike

JRC Software **Date:** 1985 **Price:** \$16.95 **Platforms:** TS 2068
Collect enough diamonds before time runs out, while avoiding falling rocks, ferocious amoebas and killer butterflies. 22 different screens and 6 levels.

Dictator

Bug-Byte Software **Price:** \$14.95 **Platforms:** TS 1000
You have become the 129th ruler of Ritimba with a single goal in mind: take full advantage of the situation for your own good. You have to deal with a handful of factions: unruly army, downtrodden peasants - but you have the secret police on your side. 16K.

Dog Race

EZRA GROUP II **Date:** 1983 **Price:** \$1.95 **Platforms:** ZX81, TS 1000
1K.

Dog Races

EZRA GROUP II **Date:** 1983 **Price:** \$2.80 **Platforms:** ZX81, TS 1000
Watch dogs chase the rabbit and guess the winner. Listing, 1K.

Software

Dogfight

Biocal Software **Date:** 1983 **Platforms:** TS 1000
Shoot down the enemy planes before they destroy your 5 planes. Fuel and ammo limits.

Domino

Photolab **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Computer version of the classic game. 16K.

Domino

JPR Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Adapts traditional game to computer. 28 dominoes divided into two ends with a number from 1 to 6. In the arcade version the player plays the computer. 16K.

Dominoes

Micromega **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 2068
Play against the computer.

DonkeyKong

Discount Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Similar to the arcade game.

Doomdark’s Revenge

English Micro Connection **Author:** Mike Singleton **Date:** 1984 **Price:** \$12.95 **Platforms:** TS 2068, ZX Spectrum
Rescue Morkin the Free, defeat Shareth the Heartstealer in battle and search for the Runes of Finorn. Sequel to Lords of Midnight.

Double Feature Adventure: Quest for the Holy Grail & The Elusive Mr. Big

Softsync, Inc. **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000
Two adventures on one cassette featuring randomly generated clues, solutions, objects, and rooms so that every time you play the games will be different. In Quest for The Holy Grail you land on a lush volcanic island and must outwit the evil Le

Software

Mechant, escape the hungry natives, and descend the underground passageways. In the Elusive Mr. Big, you are a hard-bitten detective moving against the clock to find the Elusive Mr. Big. 16K.

Dr. Floyd
Apropos Technology **Date:** 1982 **Price:** \$10.95 **Platforms:** TS 1000

Psychoanalysis by Computer? Not quite, but Dr. Floyd will carry on a conversation with you using psychoanalytic techniques, giving the appearance of artificial intelligence.

Dragmaster
Timex Computer Corporation **Model:** 06-4007 **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068

Speed your Dragmaster over the 1/4 mile drag strip in a race against the clock. Super graphics and intriguing automotive simulation lets you shift gears and monitor the speedometer and tachometer to achieve the best time.

Dragon Hunt
Powell Hargrave **Date:** 1983 **Price:** \$12.50 **Platforms:** TS 1000

Maze game played in Dragon Caves where you must find and slay three fierce dragons with your few arrows, and then try to get out. Dangers include snakes, giant bats, and the ghastly monster. A magic sword will help you if you can find it. 16K.

Dragon Lair
Syber, Inc. **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000

Fantasy role playing adventure in a multi-level cavern. Complete with monsters, wizards, magic, and spells; variable levels of difficulty; optional sound available. 16K.

Draw Poker
Trixieware **Date:** 1983 **Price:** \$20.00 **Platforms:** TS 1000

Play while you learn poker. Experts can practice strategies. Deals and plays four hands; you play the fifth hand. “Trixie’s

gang” bluff, double-bluff, two-time and four-flush you. 16K.

Draw Poker Tutor
UAS **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000

Learn opening bid strategy to improve your game. Test your bids in an eight player game of jacks or better to open (jackpots). Provides a running total of your status; a critique of your incorrect bids; and practice to improve your chances. 16K.

Dry Gulch
Upstate Labs **Date:** 1983 **Price:** \$9.94 **Platforms:** TS 1000

An interactive adventure written in the classic style. Over 100 words of vocabulary. Written in BASIC, it is listable and may be SAVED in progress. 16K.

Dungeon of the Algebra Dragons
Timeworks, Inc. **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000

You must escape from the infamous Dungeon of the Algebra Dragons. You need to find the two magic keys. When a dragon finds you, he will give you an algebra problem to solve. He will add to your gold reserves if you are correct, or take some of your gold if you are wrong. When your gold is gone, he will have you for supper. On your journey through the Dungeon, you will also be confronted by poisonous spiders, dwarfs, trap-doors, and other surprises. 16K.

Dungeon of Ymir
Silicon Mountain Computers **Author:** Gregory C. Harder and Fred Nachbaur **Date:** 1986 **Price:** \$24.95 **Platforms:** TS 1000, TS 1500

High resolution, “Dungeons and Dragons” graphic adventure game, Rogue-like. Travel to the ninth level of the Dungeon of Ymir to retrieve the Sword of Kaslo and save your village from certain doom. The dungeon is crawling with 16 types of monsters, 124 in all. Some are easy to vanquish, some are mean. A wide range of

traps, spells and other objects make a variety of playing styles possible. 24K.

Eagle Lander
BARLOG Software **Date:** 1982 **Price:** \$2.00 **Platforms:** ZX80, ZX81, TS 1000

Moon landing simulation. 1K.

Earthly Challenges
Panero Software **Date:** 1983 **Price:** \$7.25 **Platforms:** ZX81, TS 1000

Five arcade-inspired games to challenge and amuse. Includes Pickle Man, Ms Pickle Man, Supertank Warzone, Monkey Barrels and Mine Field Kaboom. 1K.

Earthquake
AARDVARK **Author:** Bob Anderson and Rodger Olsen **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

A second kids adventure. You are trapped in a shopping center during an earthquake. There is a way out, but you need help. To save yourself, you have to be a hero and save others first. 16K.

Earthquake
E & S Software **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

You are trapped in your shack during an earthquake. Outrun the tumbling building blocks. 16K.

Elevator Man
Original Software **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000

Operate the elevator in a large hotel. If you do not get to each floor quickly enough and people get into the elevator, they will fall out of the hotel windows.

Eliza
Sinclair Softech **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Does your computer answer you? Eliza does. Simulates psychotherapy/computer intelligence.

Software

Encounter
International Publishing & Software Inc **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Another UFO sighting turns into a nightmare. Your curiosity and some unknown force draw you into a waiting spacecraft. Somewhere, light years away from Earth, you are probed and examined to determine your intelligence. If you fail, you will be jettisoned with the garbage, but, if you pass, you will be sent back to Earth. If you do extremely well . . .? Now it is the Space Invaders turn to play you. 16K.

Encryptor
P & B Software **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

Turns plain text into 5-letter code groups and vice versa. 16K.

Escape
Inter-Pacific Systems Inc. **Author:** Dale Bird **Date:** 1985 **Price:** \$14.95 **Platforms:** TS 2068

Multi-frame, character-based high adventure dungeon game. Survive the challenges, navigate moving platforms and avoid traps.

Escape
Maranatha **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

You are trapped. You must avoid the starving Xdroids or guess who will be for dinner. 9 levels from inept to insane. 16K.

Escape From Manhattan
Prism Microproducts **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

The President’s plane has crashed on an island of convicts. Get there, get him and get out. 16K.

Escape from Shazzar
International Publishing & Software Inc **Author:** A. F. Nuttall **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Find the temple and escape the evil that lurks around every corner. On your journey uncover as much treasure as you

Software

can, and find the right keys to get through the doors. But, avoid the deadly fumes, poison, magic, cave-ins, bottomless pit and more. 16K.

Escape from Stalag Luft III
Simulusion **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

You are a prisoner of war. Dig tunnels, make disguises, forge papers. 16K.

Escape From the Dark System
Turner, Elcy & Com. **Model:** SOA2 **Date:** 1982 **Price:** \$13.95 **Platforms:** TS 1000

You, Bart Trueheart, along with the Kindly Old Professor and his Beautiful Young Daughter have been marooned on a space-lifeboat in the fearsome DarkSystem.

Your only hope is to boldly land where no man has landed before on Nekros, a little green men colony planet and to steal one of their starships.

You must evade surveillance satellites, police, security and military forces while finding a ship to take you home. There is little chance of success but what else can you do?

Escapees
Reindeer Enterprises **Date:** 1983 **Price:** \$6.50 **Platforms:** ZX81, TS 1000
Arcade game. 1K.

Escaping the Maze
T-S Systems **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 2000, TS 2068
Challenge your ability to escape the maze. Listing.

Eureka
Lamb’s Software, The **Date:** 1983 **Price:** \$7.50 **Platforms:** TS 1000
Graphic hidden-maze style of game where you search for the path to the treasures. Points are awarded for each treasure you reach. A game clock, treasure time, and total points are kept. Difficulty in-

creases as you improve. For each treasure you must choose whether to take a known route or to attempt a new path. 16K.

Eurogame
A. Parsons **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
A war game played over the map of Europe for one or two players. Players choose when to attack. Graphics show the map, areas won and lost, and the electronic dice. All 24 lines of display are used. Tape also includes: Cat and Mouse, Maze, and Spy Run. 16K.

Evade
Panero Software **Date:** 1982 **Price:** \$1.00 **Platforms:** ZX81, TS 1000 1K.

Everest Ascent
RAMEX International **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 2068

Executive Clue
Executive Workshop **Date:** 1985 **Platforms:** TS 2068
Computer adaptation of the board game.

Explorer I
Horizon Simulations **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
You find a strange new world when you walk into a strange mist on your way home. Text adventure.

Explorer II
Horizon Simulations **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
After a week back home once again you find yourself transported to a strange new world. Text adventure.

Expo Tic Tac Toe
ORBYTE Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
4 boards to play on simultaneously. Outsmart the computer and get 4 Xs in a row. Computer calculates best place for the answer while blocking you. 16K.

Software

Farmyard Flying
John Riggs **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Fly the biplane through farms without crashing into the towers.

Fastman
Zeta Base **Date:** 1984 **Price:** \$4.95 **Platforms:** TS 1000
Move through a complex maze with food and power pills while ghosts chase you. 2K.

Fighter
Microx **Price:** \$10.00 **Platforms:** TS 1000
Available in joystick version.

Fighter Pilot
Variety Sales **Price:** \$15.95 **Platforms:** TS 2068
Real-time flight simulation based on the F-15. 3D cockpit view. Engage in dogfights, practice or landings.

On board flight computer, all instruments, flaps, gear et cetera. Full aerobatic performance.

Firing Line
SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Graphic solitaire game. Display four cards, cards are moved/removed with arrow keys. 16K.

Five Games
Z-Games **Date:** 1982 **Price:** \$2.00 **Platforms:** ZX81, TS 1000
5 games: treasure hunt, random race, etc. Includes aircraft, landing graphics display. 1K.

Five Video Games
Frog Software **Date:** 1983 **Price:** \$2.95 **Platforms:** TS 1000
S-Invaders, Grandprix II, Astroid Attack, Nuke 2K and Sinclair Destroyer. 2K.

Face Odyssey
Red Balloon Software **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 1000
Copy of Spinnaker’s FaceMaker. 16K.

Fall of Rome
Sharp’s **Date:** 1986 **Price:** \$19.95 **Platforms:** TS 2068
395 AD: Command the resources of the Roman Empire in its struggle for survival against the eleven Barbarian tribal groups of the north. You battle with two empires of the East as they try to take advantage of your troubles. With the income of the Empire you must build and raise legions, and hire enemy armies to combat the Barbarians.

Fall of the 3rd Reich
Sharp’s **Date:** 1986 **Price:** \$19.95 **Platforms:** TS 2068
As the German player your devastated army must hold off the Allies and Russians on two different fronts, and hold Berlin as long as possible. Effects of rivers, forts, and mountains. Multiple attacks are used on both sides. A great game to learn what really happened to the Third Reich the last few months. A real nightmare for the player.

Fantasy Games
Sinclair Research Ltd. **Author:** Psion **Date:** 1981 **Price:** \$8.95 **Platforms:** TS 1000
Two role-playing adventure games. In Perilous Swamp, you must survive the monsters and rescue the princess. Escaping from Sorcerer’s Island is even harder. 16K.

Fantasy Pak
Reston Publishing Company **Date:** 1983 **Price:** \$29.85 **Platforms:** TS 1000
Monarch, Invasion Force and Escape from Shazzar.

Software

Flat Racing

UAS **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Handicap the thoroughbred horses on any track. Enter data from the racing form and find the potential winner. 16K.

Flee

Biocal Software **Date:** 1983 **Platforms:** ZX81, TS 1000

A road racing game. Steer your formula car to a new distance record. 1K.

Flight Simulation/Airline Management

Hensley & Associates **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

The ultimate in an exciting, educational, and edge-of-seat game for all ages. Experience the tremendous real-time graphics capability of your computer. You are faced with one crisis and decision after another concerning the survival of your aircraft, your airline business, and your passengers. 16K.

Flight Simulations

Charles J. Bonner **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Four flight programs; some with graphics. Guide a parachute to a target; fly a bi-plane over a mountain range; fly a jet airliner across the Pacific Ocean; navigate a spaceship from the Asteroid Belt to Earth orbit. 2K.

Flight Simulator

Timex Computer Corporation **Model:** 06-3000 **Author:** Psion **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

Full controls, instrumentation and a view of the horizon. Enjoy the thrill of flying an airplane. See if you can take-off, land, bank, dive and climb without crashing. Cockpit controls, navigation map, instrument panel and instrument landing system guide you along the way.

Flight Simulator

Hensley & Associates **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

A real-time flight simulation program for all armchair pilots: aircraft control, instrument reading, flight path viewing, and close encounters with flight hazards. Includes a “pilot rating” scoring system to measure your skills in handling these controls. 16K.

Flight Simulator

Timex Computer Corporation **Model:** 03-3002 **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Full controls, instrumentation and a view of the horizon. Use the radio beams and radio compass to navigate. Avoid hazards near the landing field. Promotes an understanding of air flight. 16K.

Flight Simulator (cart)

Timex Computer Corporation **Model:** 07-3000 **Author:** Psion **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

Full controls, instrumentation and a view of the horizon. Enjoy the thrill of flying an airplane. See if you can take-off, land, bank, dive and climb without crashing. Cockpit controls, navigation map, instrument panel and instrument landing system guide you along the way.

Flight Simulator (cart)

Timex Computer Corporation **Model:** 07-9004 **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Full controls, instrumentation and a view of the horizon. Use the radio beams and radio compass to navigate. Avoid hazards near the landing field. Promote an understanding of air flight. 16K.

Flip-Flop

Haymarket Software Co. **Date:** 1982 **Price:** \$10.95 **Platforms:** TS 1000

Outsmart your opponent or the computer to win: get four pieces of the right color in a row. The problem is that the space a piece is on determines the color. 5 levels of difficulty. 16K.

Flips

Lamb’s Software, The **Date:** 1982 **Price:** \$6.00 **Platforms:** TS 1000

Software

Football

Zamis Engineering **Date:** 1982 **Price:** \$9.95 **Platforms:** ZX81, TS 1000

1981 and 82 NFL stats at your command. Display by team, division and more. 16K.

Football Forecaster

ZETA Software **Author:** Gary Smith **Price:** \$19.95 **Platforms:** TS 1000

Database for the 1982-83 season. College and pro versions. 16K.

Football Predictor II

Bronze Star Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Know who will win any pro game before it is placed. Program uses statistics you update weekly in order to predict the potential of each team and the expected final score. 16K.

For Adults Only

Haymarket Software Co. **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000

After conducting private interviews with you and your lover, the computer will select a sexual scenario (from over one hundred) that fits your combined moods. This one is so large it was actually written in three parts. Though definitely not for children, this program can be educational as well as a lot of fun. 16K.

Fortress of Zorlac

Timex Computer Corporation **Model:** 03-4013 **Author:** Paul Carlson **Date:** 1982 **Price:** \$10.95 **Platforms:** TS 1000

You are commander of a fleet of spaceships. Your mission is to rid the galaxy of the dreaded alien, Zorlac. 16K.

Fortyniner

G. Russell Electronics **Price:** \$9.00 **Platforms:** ZX81, TS 1000, TS 1500

A two dimensional puzzle type of game with a purpose similar to Rubik’s Cube. The player initially chooses difficulty level from which the computer will create the puzzle (new every time). The goal of each game is to change the display to a single video type. 16K.

Flower

Biocal Software **Date:** 1983 **Platforms:** TS 1000

Display program plots ellipses in a spiral pattern. Watch as many varieties bloom.

Focus

JPR Software, Inc. **Date:** 1983 **Platforms:** TS 1000

Find pairs of characters behind the grid of a black square. Tests your memory. Earn or lose points depending on how well you remember the locations.

Football

Software Development Associates **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

College football for 1 or 2 players. You select from 1 of 7 offensive plays and the computer sets the defense, and determines the outcome. 16K.

Football

Banta Software **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000, TS 2068

One or two players, stationary graphics. Uses statistics to calculate gains and plan strategies. Truly a game for the thinking person. TS 2068 version in color.

Football

Sight & Sound Electronics **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

You make all the coaching decisions, while the computer refs the game, runs the scoreboard, and prints out a stat sheet at the end. 16K.

Software

Four 16K Programs
Powell Hargrave **Date:** 1983 **Price:** \$12.50 **Platforms:** TS 1000
Math Tutor: Five levels of tutoring in addition, subtraction, multiplication and division. Typing Skills: Sets you against the computer at your selection of typing speed. Birds swoop to attack. Intercept them with missiles. Astro Smasher: Dodge asteroids as you try to smash all the enemy ships. 16K.

Four 2K Adventures
Adventure Club **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000
Tank Track (supreme strategy); 3D caves (can you get out?); City Skipper (arcade action); Zephus Lair (arcade adventure).

Four Games for the ZX-80
Cecil Bridges **Price:** \$10.00 **Platforms:** ZX80
Dragon Castle Adventure, Betting System for Horse Players, Robot Composer, ESP Guessing.

Four in a Row
Computer Software Associates **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Game for 2 or more players on a vertical board with 8 columns and 8 rows. Get 4 pieces in a row: horizontally, vertically, or diagonally. Players alternate turns until a win is achieved. 16K.

Fourth Protocol
Curry Computer **Price:** \$19.95 **Platforms:** ZX Spectrum

Frankie Goes To Hollywood
Curry Computer **Price:** \$19.95 **Platforms:** ZX Spectrum

Frantic
Just Games **Date:** 1983 **Price:** \$9.00 **Platforms:** TS 1000
You have entered an unexplored labyrinth where just to touch the electrified walls could prove fatal. You are not alone

because Evil Otis and his band of faceless robots are out to destroy you. Your only hope is to blast them first. 16K.

Frog
Mikro-Gen **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
An amusing test of skill. The goal is to get across the river by jumping from log to log without mishap. Supports Mikro-graph joystick. 16K.

Frogger
Timex Computer Corporation **Model:** 06-4008 **Date:** 1983 **Platforms:** TS 2068
Released by Games to Learn By.

Frogger
Timex Computer Corporation **Model:** 03-4012 **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000
The official Frogger by SEGA. Plays like the arcade game, but without sound. You must avoid traffic, snakes, crocodiles, and treacherous diving turtles by “hopping” the frog. The frog must reach home before the time runs out. Developed by Cornsoft Group, Inc. 16K.

Froggy Highway
Spectracomp **Date:** 1984 **Price:** \$7.97 **Platforms:** TS 1000
2K version of the arcade game.

Froggy Hop
Just Games **Date:** 1982 **Price:** \$9.00 **Platforms:** TS 1000
Can you help a poor little frog? He wants to go for a swim in the lake. But the lake is on the other side of the road. Would you please help this frog get to the lake? 16K.

Fun & Games
H & H Electronics **Date:** 1983 **Price:** \$9.00 **Platforms:** ZX81, TS 1000
12 game programs that include: Auto Racer, Blackjack, Depth Charge, Display Program, Mini Artist, Three Towers, Rus-

sian Roulette, Craps, Atlantic City Slots, and three more. 1K.

Fun and Games I
SyncWare Co. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
5 games: Syncwars, Minotaur, Nim, ContsEntration, and TS Doodle. 2K.

Fun and Games Package
Florida Creations **Date:** 1983 **Price:** \$2.00 **Platforms:** ZX81, TS 1000
Lunar Lander: Try to land on the pad without blowing up. Secret Code: Converts your special messages to unintelligible code and back again. Draw: Draw and sketch on the screen. Listing. 1K.

Fun Golf
Timex Computer Corporation **Model:** 06-4012 **Author:** R & R Software **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068
Up to two golfers can enjoy a 9- or 18-hole trek around the green. You must hit the ball from tee to hole and avoid the bunkers, water treads, trees, and roughs to score low. Converted from Spectrum Golf by SoftSync.

Furious
Daedalus Software **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000 16K.

Galactic Commando
International Publishing & Software Inc **Date:** 1982 **Platforms:** TS 1000
Space war adventure.

Galactic Gunner
Timex Computer Corporation **Model:** 03-4020 **Author:** Paul Carlson **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Dogfight with a fleet of enemy ships. Destroy as many as you can in the limited time. Misprinted as “Atlantic Gunner” in Ramblings n4. 16K.

Software

Galactic Pak
ROMPAK **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Galactic Patrol
Computer Software Associates **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Your 6 year mission is to explore new worlds, to go where no being has gone before. Your job, as captain of the Galactic, is to protect the lives of the 500 aboard and to operate the bridge. 16K.

Galaxians & Gloops
Quicksilva **Author:** T. Beckwith **Date:** 1983 **Price:** \$16.00 **Platforms:** TS 1000
The peaceful Fragnn battle the large Wobbly Galaxian birds with a device built of dragon gut and with small furry bombs.

Galaxy
Bob Woish **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000
As you zoom through space, a number of galaxies are encountered. You must accurately report the number of stars in each before it disappears in order to succeed. 2K.

Galaxy Attack
Timex Computer Corporation **Model:** 06-4018 **Platforms:** TS 2068
Not released.

Galaxy Invaders
International Publishing & Software Inc **Date:** 1982 **Platforms:** TS 1000
An excellent version of the classic space game. Protect your seven lives against fleets of hostile invaders, who swoop down and attack quickly. This version is an excellent demonstration of the capabilities of the ZX81 or TS 1000 to entertain and excite for hours. 16K.

Software

Galaxy Master

MicroSync Software **Date:** 1983 **Price:** \$4.00 **Platforms:** ZX81, TS 1000

Fight the aliens on the top; watch out for the bombs that they drop. 3 levels of play. 1K.

Galaxy Warrior

Artic Computing **Date:** 1981 **Price:** \$4.50 **Platforms:** TS 1000

Defend your star base, hunt the Clin-gons and go through black holes. 16K.

Gallery

Story Software **Date:** 1983 **Price:** \$15.98 **Platforms:** TS 2068

Shoot down the targets.

Gambler One

Software Development Associates **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Contains Bandit and Roulette. 16K.

Game Bag for Kids

Games to Learn By, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 2068

Menu-driven assortment of simplified games. Hangman, Dinosaur Attack and Tic-Tac-Toe.

Game Board

Frank Lockhart **Date:** 1985 **Price:** \$9.95 **Platforms:** TS 2068

It's you against the computer. It picks a secret number, from 1 to 6. You must guess it to move 1 to 24 spaces. Can you go around the board in 75 tries?

Game Master

Soft-Way **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Make your own adventure games with no programming required. Menu driven tool allows you to play or change the game at will. 16K.

Game Pac

ZOR KHAN Industries **Model:** G.6 **Author:** P. Massengill **Date:** 1982 **Platforms:** TS 1000

Game Pack for the ZX81

Mark E. Rogers **Date:** 1982 **Price:** \$5.00 **Platforms:** ZX81, TS 1000

Four 1K games. Bomber: move the bomb sight over the target, very fast. Mis-sile: destroy the missiles before they hit your spaceship. Auto 3D: enter 4 numbers; ZX81 will draw tunnels and spirals and much more depending on numbers. Speed Draw; the ZX81 starts a line; control it by the right keys to produce all sorts of pictures. 1K.

Game Pack I

Panda Software **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000

Life escape, maze runner and IQ puzzle. 16K.

Game Tape

Rave Research **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000

Checkers: The computer is used to draw the board, move the pieces, keep score, and announce the winner. 6 Dice: Any number can play; computer keeps track. Includes a very fast Big Letter routine. 16K.

Game Time I

Timex Computer Corporation **Model:** 06-4017 **Platforms:** TS 2068

Not released.

GameMaster

McKelvie Programs **Date:** 1983 **Price:** \$14.95 **Platforms:** ZX81, TS 1000

A control and record keeping system for role-playing fantasy adventure games. Aids in role play by taking over chores of the typical game. 8 functions: Creates and reviews characters. Create up to 6 monsters at a time. Review monsters. Traps, secret doors, surprises. Wandering monsters. Full range of game dice to help resolve chance situations. 1K, 2K and 16K.

Games

Rose Cassettes **Date:** 3/1/1981 **Price:** \$10.80 **Platforms:** ZX80

Games

Bridge Software **Date:** 1982 **Price:** \$12.00 **Platforms:** ZX81, TS 1000

Duck Shoot, Moonlander, Hangman, Crossword, Letter Square. 1K.

Games I

SyncWare Co. **Date:** 1983 **Price:** \$10.50 **Platforms:** TS 1000

Listing, documentation, and cassette of four games. Sync wars: keyboard reaction time; in 1K, 2K and 16K. Guess My Number: Logical deduction. Blackjack: Sheer luck, 16K.

Games One

Software Development Associates **Model:** G101 **Date:** 1983 **Platforms:** TS 1000

Match23, Battlecard, Gunner, Mug-wumps and Snark. 2K.

Games Pack

Spike-Soft **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068

The Sandstone Factor, Base-X and Taxi-Tracker.

Games Pack

JRS Software **Price:** \$9.90 **Platforms:** ZX81, TS 1000

3-D Battle, City Bomb, Warp Wars, Snake, Sweet Tooth, Slalom, Black Holes. 1K and 16K.

Games Pack #1

Crystal Microsoft Ltd **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Hammurabi, Mini-Droid and other small programs for education and entertainment. 2K.

Games Pack 1

LINSAC **Date:** 1982 **Price:** \$10.00 **Platforms:** ZX80

Three towers, number guessing, mas-termind, sketcher, hurkle, nim, symbol si-mon. 1K.

Software

Games Pack 1

Gladstone Electronics **Price:** \$9.95 **Platforms:** ZX80, ZX81

Eight programs including Digiclock, 9-Lives, Reaction Test, Gobbler and Patterns.

Games Pack 2

LINSAC **Date:** 1981 **Price:** \$10.00 **Platforms:** ZX80

Nine lives, the maze game, plain sailing, noughts and crosses, Chinese puzzle, tower of Hanoi, battleships. 1K.

Games Pack 2

Gladstone Electronics **Price:** \$9.95 **Platforms:** ZX81

Four BASIC programs: Pontoon, Fruit Machine, OXO, and Bio-rhythms.

Games Pack 3

LINSAC **Date:** 1981 **Price:** \$10.00 **Platforms:** ZX80

Fruit machine, four-in-a-line, zombies. 2K.

Games Pack 3

Gladstone Electronics **Price:** \$9.95 **Platforms:** ZX80, ZX81

Two programs: 3-D OXO and Mars Rescue.

Games Pack 4

Gladstone Electronics **Price:** \$9.95 **Platforms:** ZX81

Zombies: escape as they chase you around Zombie Island. Lure them into pits but don't fall in yourself. Mount Mayhem: can you reach the 20,000 foot summit? Look out for Yetis and other hazards.

Games Pack Four

John Riggs **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

In Speedway your car is racing for the record length without crashing into the computer's car. Tic-Tac-Toe is the popular game three-in-a-row in which you play against the computer-with-a-strategy. 2K.

Software

Games Pack One

John Riggs **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Boxing has you fighting the computer opponent. Cosmic Attack uses both skill and response time to keep from being captured. 2K.

Games Pack Three

John Riggs **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Hangman has the computer select a word for you to solve. In Spaceship Lander you try to bring down a falling spacecraft. 2K.

Games Pack Two

John Riggs **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Draw Poker is much like the famous card game, but for one player. Laser Destroyer is a weapon used to keep Earth save from invaders. 2K.

Games Sampler

2-Bit Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Four games. Kamikaze Fly: A dexterity game in which Freda the Frog tries to eat dinner. Sketchpad: An easy to use screen drawing program. Navajo Rugs: Generates kaleidoscopic patterns randomly. Biorhythm: Plots your mental, physical, and emotional states on any given day. 2K.

Games Three

Software Development Associates **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Depth Charge, Bowling, Bingo and Tic-Tac-Toe. 2K.

Games Two

Software Development Associates **Model:** G102 **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000

Darts: For 1 or 2 players. Throw at a target that has 10, 20, & 30 point zones. Score 200 points to win. Mastermind: Try to guess a secret 4 digit code that is randomly selected by the computer. 2K.

Gamestape 1

J. K. Greye Software **Price:** \$6.00 **Platforms:** ZX81, TS 1000

10 games, including: Klingons, Crash Landing, Simon, Artist, UFO, Code (Mastermind), Asteroids, Bomber, Kaleidoscope, Guillotine (Hangman).

Breakout, in machine language, was added to the Melbourne House version. The rest are in BASIC.

Gamestape 2

J. K. Greye Software **Date:** 1981 **Price:** \$7.50 **Platforms:** ZX81, TS 1000

Three programs: Starfighter, Pyramid, Artist. STARFIGHTER is a machine code space battle, with twinkling stars and stunning explosions. PYRAMID is a thinker's game; ARTIST, the ultimate graphic designer's aid.

Gamestape 3: Catacombs

J. K. Greye Software **Date:** 1981 **Price:** \$9.00 **Platforms:** TS 1000

Multi-level graphics adventure that is not limited in its scope. Each level can contain up to 9 rooms, 8 passages, as well as monsters, food, gold, traps, phantoms. 16K.

Gamestape 4: 3-D Monster Maze

J. K. Greye Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Can you find your way through the maze? The exit is there somewhere ... but so is a T. REX. Written in machine code, the 3D Monster Maze has been rated among the finest ZX81 and T/S 1000 games available. 16K.

Gamestape 5: 3D Defender

J. K. Greye Software **Date:** 1982 **Price:** \$9.00 **Platforms:** TS 1000

You have to save your home planet from the marauding alien spacecraft. Your view screen shows you in 3-D the view out your fighter cockpit window. The background moves when you turn or fly up or down, just as if you were really flying it. The

enemy craft will actually zoom towards you and shoot at you if you let them. 16K.

Generala

Knighted Computers **Date:** 1985 **Price:** \$17.00 **Platforms:** TS 2068

Very similar to games you may have played using dice and a score pad. Generala is a very popular game in most Latin American countries as well as Europe, usually played at home, at the pub or bar. If you like Yahtzee, you'll love Generala.

Ghost Hunt

Personal Software Services **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Gobble your way through a maze of ghosts, power pills, etc. Chomp your candy to keep running; try a power pill to make a meal out of the ghosts. 16K.

Ghost Town

Quicksilva **Date:** 1985 **Price:** \$9.95 **Platforms:** TS 2068

This adventure takes you back to the good ole west. You have to find Jake Clamplett's gold mine and hidden gold. Then return to town surviving the desert.

Gin-Rummy

Biocal Software **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000

Go-Boom

John Riggs **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Move the basket left and right to catch the falling bombs or they will all go-boom.

Gobble

Data-assette **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Fast-moving maze game that simulates the original (Pac Man). Ten levels of difficulty. 16K.

Gobble Man

Artic Computing **Date:** 1982 **Platforms:** TS 1000

You are chased around a maze by ghosts. If you can eat some magic food you

have a chance of stopping the ghosts. This is a superb realization of this exciting game for the ZX81 and TS 1000 computer. Written in machine code, with excellent graphics, there is also a personalized 'high-score'. 16K.

Gobble!

Flint Data Systems **Date:** 1982 **Price:** \$5.00 **Platforms:** ZX81, TS 1000

Pac Man-like game. 1K.

Gobblers

Software Farm, The **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Pac Man clone.

Gobbling Goblins

Just Games **Date:** 1982 **Price:** \$9.00 **Platforms:** TS 1000

16K.

Goldmine

Glassware - D. Glass **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000

A challenging, full-screen graphics game, with on-screen instructions and prompts. You (the miner) move into the mineshaft, collecting gold pieces. Blast away rocks to get more, but watch out for cave-ins above. Blast your way back out to cash in part of your gold for more dynamite, and put the rest in the bank. 16K.

Golf

Biocal Software **Date:** 1983 **Platforms:** ZX81, TS 1000

Get your clubs out and play a few holes. Good for judging distances. 1K.

Golf

Sean Wilson **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Play golf with a full view of the course; nine hole course; close up of green for your putt. Superb graphics. For one or two players. 16K.

Software

Golf

Prism Microproducts **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

Play the game of golf: deal with sand, rough, trees et cetera. 16K.

Golf Game

Asia Tsucho Co., Ltd. **Date:** 1983 **Price:** \$14.00 **Platforms:** TS 1000

A full scale golf simulation game of 18 holes by adopting the table of random numbers system. By inputting in sequence club select, direction, strength, you can enjoy your golf game with green scenery varied from time to time. 16K.

Grand Prix

Personal Software Services **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Drive a race car around a twisting road course. Speed, gearbox and braking are under your control but the patches of oil and other hazards are not. 16K.

Graph with Submarine

T-S Systems **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 2000, TS 2068

Steer the submarine through a narrow channel with the left and right cursor keys. Listing.

Graphic Golf

Mindware, Inc. **Author:** Silversoft **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

A full 18 hole, championship golf course. You face a brand new set of hazards each time you tee up: trees, bunkers, and gusts of wind. Make a choice of club (wood, iron, putter) and strength of choice. You also aim the shot. 16K.

Graphics Ladders

Integrated Data Systems **Date:** 1983 **Price:** \$11.80 **Platforms:** TS 1000

Get down the ladders and bury the enemy on your way. 16K.

Graphics Six Pack

Softsync, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** ZX81

Six great games on one cassette. Listings of the programs and instructions on how to upgrade and modify them are included in documentation. Twirly Invader: Shoot the man from Mars. Winding Stairway: Navigate through the winding stairway. Astro Dodger: Avoid flying space debris. Cross The Road: Avoid being hit by passing automobiles. Plus Alien Invaders and Defend. 1K.

Great Britain Ltd

Data-assette **Author:** Simon W. Hessel **Date:** 1982 **Price:** \$10.25 **Platforms:** TS 1000

You are Prime Minister and Chancellor of the Exchequer of Great Britain. Your aim is to stay in office as long as possible. Sold as “Run the Country” by Gladstone. 16K.

Great Game and Graphics Show

JRC Software **Date:** 1985 **Price:** \$24.95 **Platforms:** TS 2068

Lunar Lander, Dodgem, Touch Type, Pac’M, Etchsketch and The Great Graphics Show.

Great Uncle Arbuthnot’s Inheritance

Mikro-Gen **Author:** Simon W. Hessel **Date:** 1982 **Price:** \$10.25 **Platforms:** TS 1000

You have been left your Great Uncle Arbuthnot’s whole estate. But first you have to prove you are worthy of the inheritance by turning \$10,000 of it into \$100,000 by investing in the stock market and the metal market within 26 weeks. You have a further 26 weeks to make \$100,000 running a soft drink factory. 16K.

Great Western

Data-assette **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Take your wagon train across North America using maps, both national and local. Hunt for food, trade for food, water, am-

munition. Beware of attacks on your wagon train. 16K.

Gremlins

English Micro Connection **Date:** 1984 **Price:** \$9.50 **Platforms:** TS 2068, ZX Spectrum

Defeat the aliens who fire double photon bolts at you.

Gridlock

2-Bit Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Four programs. Tow Truck: tell the driver where to find your stalled car. Foggy Sea: Cartesian coordinates help you rescue a missing ship. Robot: program the robot arms to repack two cartons in the smallest number of moves. Easy Plot: displays plot of equations for Y as a function of X.

Gridrunner

Quicksilva **Author:** Jeff Minter **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

Devilishly fast arcade game not unlike Centipede. You control a combat ship, the Gridrunner. Above you are the Gridsearch squads, caterpillar types who run in a line across each level of the grid and quickly descend to the next. If you knock off the caterpillar units one at a time and in order, you’re OK, but if you split them in the middle, they become little independent units of destruction and are harder to destroy. There are also the X and Y Zappers who run across the bottom of the grid. The X zappers usually harmless, but the Y zapper fires a deadly energy beam. Your objectives: Clear the grid of the Gridsearch Squads - or die trying.

Grimm’s Fairy Trails

Timex Computer Corporation **Model:** 03-4004 **Author:** George Grimm **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Grimm’s Fairy Trails is a Pac-Man take-off with six speed variations. By pressing the arrow keys, you control the movements of Prince Billy, who is being pursued by two

Software

dwellers, Murph and Drago. To finally defeat them, you must move about the maze collecting dots to get 250 B-Lers (life crystals) to make the maze dormant. If you touch either Maze Dweller then it is game over but in the center of the maze is the Sacred Stone of Ross which awards you an extra life, once per game. There are six levels of play to choose from (1-6) from Poison Apple to Super Prince.

The characters and items are named after his colleagues at Timex Computer Corporation: Billy Skyrme (director), Bob Behler (engineering), Carlos Dragovich (production), Margot Murphy (marketing) and Dan Ross (VP).

Growing Snake

T-S Systems **Date:** 1983 **Price:** \$4.00 **Platforms:** TS 2000, TS 2068

You control the head of the snake with the cursor control key and the rest of his body will follow.

Guadalcanal

Softwar **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

You are the commander of a submarine which encounters an enemy convoy. Your mission is to eliminate the entire fleet. Ten commands help you control your torpedoes, missiles, and sabotage missions. The enemy counter-attacks with depth charges, mines and escort boats. 16K.

Guard the President

Intercomputer, Inc. **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000

The object of the game is to protect the President’s life as he speaks to huge crowds on his foreign tour. You control two bodyguards who must detect and eliminate terrorists in the crowd. Your reflexes must be swift in order to preserve the life of the President as well as your own, without hurting innocent people. 16K.

Software

Guardian

Timex Computer Corporation **Model:** 06-4009 **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068

Enemy ships have been spotted off your shore. Your mission is to blow them out of the water. Your ship - an Ohio-class heavy cruiser - is armed with both conventional and nuclear missiles. The enemy fleet is made up entirely of Liden-class droid frigates, "manned" by a 100% robotic crew and armed with deadly lasers. See how many of the enemy you can destroy before your time runs out!

Guess It

Run-It Software Club **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Guess-it, find-it and tutorial binary search. 2K.

Guess It

Skelly Computing **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000

Number game with 3 levels of play and prompting. 16K.

Guess My Number

Michael B. Williams **Date:** 1983 **Platforms:** TS 1000

Game for two players; uses names and keeps score. 2K.

Guess the Animal

Biocal Software **Date:** 1983 **Platforms:** TS 1000

Self-learning game in which the computer questions you.

Guess the Number

Frank Lockhart **Date:** 1985 **Price:** \$9.95 **Platforms:** TS 2068

Computer generates a secret number from 1 to 99. Tells player if guess is high or low. Plays tune on correct guess.

Gulp

Campbell Systems **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Fast paced game of chase and escape. Dash through 5 different mazes; pick up

points by gulping food along the way. But you share the maze with the hungry ogre, and he is out to gulp you. The more you eat, the angrier he gets, and the faster he will chase you. Nine speeds and difficulty levels. Gulp II has its own unique features, which includes 15 mazes, 9 grades, and 9 speeds. Also sold as "Gulper." 16K.

Gulpman

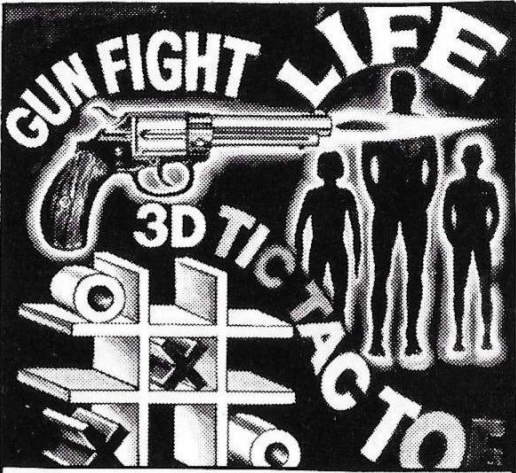
Softsync, Inc. **Author:** John A. Campbell **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

In Gulpland, a typical Gulpman dashes through a maze of apple trees to satisfy his voracious appetite for apples, but the Wormoids are constantly after him. They move faster and faster, but he has 9 lives, 15 mazes; 9 levels; sound effects. Adaptation of the ZX Spectrum version by Campbell Systems.

Gunfighter

Game Room, The **Date:** 1983 **Price:** \$3.00 **Platforms:** ZX81, TS 1000

You against ZX bad guys. 1K.



Gunfighter/Tic-Tac-Toe/Life

Gladstone Electronics **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000

An excellent graphic representation of an old time wild west shootout. For one player against the ZX81, or two. Six levels of skill. 3D TIC-TAC-TOE: A much more challenging and interesting version of the

Software

Hangman

American Micro Products, Inc **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000

Preprogrammed with 235 words; however, the user can replace these with more than 500 words. 16K.

Hangman

Gladstone Electronics **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Two version. Movies: Over 100 titles and film stars; 3 categories. Superheroes: Names and their arch-enemies. 16K.

Hangman

Robert J. Midura **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Features a graphics display, a scratch sheet display to keep track of letters guessed. Seven word categories, score keeping and 400 word dictionary (pre-recorded dictionary: animals, vegetables/fruits/herbs, music, astronomy, birds, automobiles, and geography). Create your own dictionary. 16K.

Hangman

Z-West **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000

The computer becomes a very special vocabulary tutor in this traditional game of Hangman. Discover the unknown word before you are hanged! 5 levels of play with 5 words in each level. 16K.

Hangman

Biocal Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000 16K.

Hangman & Tic-Tac-Toe

Foote Software **Price:** \$5.95 **Platforms:** TS 1000

Hangman 500

Mind Games **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000

Computer draws on over 500 words.

popular game. LIFE: Simulates the birth, growth, and death of a cell colony. The human player sets up the ground rules and then watches the results of his decisions. 16K.

Gyruss

Parker Brothers **Date:** 1984 **Platforms:** TS 2068

Implementation of the arcade game on cartridge.

Handicapper

M. H. Marks Enterprises **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Make more intelligent decisions at the wagering window. After pertinent data obtained from standard racing programs is entered, the computer assigns appropriate "points" to each parameter based on a weighted system and a display of the percentage of "chance to win" of each horse in the field. 16K.

Hang Robot

Isthmus **Date:** 1984 **Price:** \$5.95 **Platforms:** TS 1000

Variation on the original. One to four players enter their own words or solve from pre-programmed words.

Hang-Word

User Friendly Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Word learning game with multiple levels, from elementary to college. 16K.

Hangman

Softsync, Inc. **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

A learning tool to tutor children (ages 6-12) in spelling. Seven versions of Hangman. Play against the computer's five pre-recorded libraries of categorized words (each up to 17 letters): animals, science, countries of the world, states of America, and fruits and vegetables. Create your own library of 500 words. 16K.

Software

Hangman, Matchstick game, Battleships, Hi-low

Artic Computing **Model:** G1.01 **Price:** \$9.50 **Platforms:** ZX80
Games for the 1K ZX80.

Haunted House

AARDVARK **Author:** Bob Anderson **Price:** \$9.95 **Platforms:** TS 1000

The house has ghosts, goblins, vampires and treasures — and problems designed for the 8 to 13 year old. This is a real adventure and does require some thinking and problem solving but only for kids. 16K.

Haymarket Hangman

Haymarket Software Co. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Five categories with instructions on how to change the category names to suit individual needs. Each category contains up to 50 words and the computer even adds the words you use when playing with two players. In effect, the computer learns. Increase your children’s vocabularies or just put in their spelling list. 16K.

Headquarters

Skelly Computing **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000

Navigate your space ship through the asteroids to find headquarters.

Hi-or-Lo

Bob Woish **Date:** 1983 **Price:** \$0.50 **Platforms:** ZX81, TS 1000

Classic “guess-my-number” game. 1K.

Hiding

E & S Software **Date:** 1984 **Platforms:** TS 1000

You are an American sub commander searching for a Russian sub hiding in American waters. Mix of graphics and text.

High Rollers

Just Games **Date:** 1982 **Price:** \$9.00 **Platforms:** TS 1000

16K.

High-Res Blackjack

Silicon Mountain Computers **Author:** Fred Nachbaur **Date:** 1986 **Price:** \$9.95 **Platforms:** TS 1000

Blackjack program written in SRAM HI-RES Extended BASIC. The game logic was adapted from a similar game Fred had written earlier for the first “TRS-80 Pocket Computer.”

High-Res Chess Upgrade

Silicon Mountain Computers **Date:** 1988 **Price:** \$9.96 **Platforms:** TS 1000

Upgrade to Psion Chess. Big board display showing all chess pieces as they should look. Messages printed in 64 column characters on left. Comes with instructions on modifying original Psion Chess. Uses WRX16 Hi-Res routines.

Highway

John Riggs **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Highway Encounter

Curry Computer **Price:** \$12.95 **Platforms:** ZX Spectrum

Hollywood

Biocal Software **Date:** 1983 **Platforms:** TS 1000

As a movie produce you must obtain actors, script, and a director. Spending money begets money.

Hopper

Personal Software Services **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Can you help Fergy and his friends get across the highway and back to the lily pond? Includes crocodiles, logs, varying speed traffic, etc. 16K.

Horace & the Spiders

Timex Computer Corporation **Model:** 06-4019 **Author:** Psion **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 2068

You must get to the web and destroy the spiders before they can poison you. You are supplied with the antidote, but you must be quick before the serum runs out.

Horace Goes Skiing

Timex Computer Corporation **Model:** 06-4015 **Author:** Psion **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 2068

Delightful animated graphics program gives hours of fun. But you also need skill to help Horace slalom down the slopes, between the flags — without hitting the trees. Even before he tackles the slopes, you must help Horace to cross the busy road without getting hit by oncoming traffic.

Horse Master

CRC Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Before you go to the track, consult with the Horse Master. Your racing form or local newspaper gives you the date, and this program will help you analyze it. 16K.

Horse Race

EZRA GROUP II **Date:** 1982 **Price:** \$1.95 **Platforms:** ZX81, TS 1000

A five-horse race that can be expanded. No ties. Listing, 1K.

Horse Race

Just Games **Date:** 1982 **Price:** \$9.00 **Platforms:** TS 1000

This horse race game is just like the real thing. First, the players place their bets. Then the track is displayed, and the horses line up at the starting gate. And they are off, the crowds cheer as the horses thunder across the finish line. The betting outcome is then tabulated and the next race announced. 16K.

Horse Race Handicapping Program

3G Company **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000

Scientifically derived system for calculating odds on horse race. Hundreds of races were analyzed and numerical probabilities computed to form the basis of this program. 16K.

Software

Horse Racing Handicapping

A. Doty **Date:** 1983 **Price:** \$12.50 **Platforms:** TS 1000

Analyses thoroughbred races giving critical handicapping parameters for each horse. Based upon statistical methods by using key past performance information to aid in predicting potential winners. 16K.

House of Gnomes

Bug-Byte Software **Price:** \$16.00 **Platforms:** TS 1000

Find the treasure and escape with it. 16K.

Hungry Animal

T-S Systems **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 2000, TS 2068

Maneuver a hungry centipede along a tunnel without touching the walls while eating as many grubs as possible.

Hungry Horace

Timex Computer Corporation **Model:** 06-4014 **Author:** Psion **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 2068

Hilarious adventure game in which you help Horace tease the park guards by stealing their lunch, eating flowers, and ringing the alarms — but don’t let the guards catch Horace or all is lost. Increasing levels of play provides a real challenge to the novice as well as the expert.

Huntman

Funware **Date:** 1982 **Price:** \$4.95 **Platforms:** TS 1000

16K.

ICBM Barrage

Panero Software **Date:** 1982 **Price:** \$2.00 **Platforms:** ZX81, TS 1000

1K.

Incredible Super Tape

JRC Software **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000

45 programs on one tape. 1K to 16K.

Software

Inteli-Quiz

S.C.I. **Date:** 1982 **Price:** \$6.00 **Platforms:** TS 1000
Quiz games with multiple quizzes per cassette. Includes general knowledge, movie trivia and sports trivia. Also sold as Quiz Wiz. 16K.

Intruder Alert

Michael B. Williams **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Escape from the guardian robots. Shoot and move in eight directions. Two player. 16K.

Invaders

Bug-Byte Software **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Shoot down the marching aliens with your rapid fire laser cannon before they take over the planet forever. Shields are provided to help protect you from the bombs of the marching aliens. Ten levels of play, from easy to suicidal. 16K.

Invaders

XOR **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 1000
High-resolution version of the game that does not require extra hardware.

Invasion Force

Artic Computing **Author:** Simon Wadsworth **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
The huge mothership hovers above your base raining missiles and bombs down onto you. Blast through its force field and destroy it before you are disintegrated ... but don't hit the reconstruction zones or all the damage you did to the mothership is instantly rebuilt! Fast paced machine code action. 16K.

Invincible Island

Sourceware, Inc. **Date:** 1983 **Platforms:** TS 2068
Split-screen graphic and text adventure. Adaptation of the original by Richard Shepherd Software for the ZX Spectrum.

Island Kingdom

American Micro Products, Inc **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000
You are set on a small island kingdom as a ruler of a hungry group of peasants. You must contend with untrustworthy neighbors, crop failures, industrialization, education, pollution, and an occasional tidal wave. 16K.

Island Squares

EZRA GROUP II **Date:** 1982 **Price:** \$2.00 **Platforms:** TS 1000
Listing, 2K.

J.D. Arcades

Prism Microproducts **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Three popular games with novel twists. 16K.

Jackpot Casino

Banta Software **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
Seven casino-type games: roulette, craps, blackjack, one-armed bandit, horse-ace, acey-ducey, and 5 card draw. 2K



Jackpot tape has only 6 games. 2K and 16K.

James Bond Adventure #1

Smartware **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
You help "Agent 007" make the right decisions to complete his mission. Of course, you will travel to exotic places, fight against overwhelming odds, and hopefully save the world. 16K.

Jeopardy

Intercomputer, Inc. **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Improve your memory with this game. You are dealt 45 cards, face up, including one wild card. Before seeing the cards, you must pick the number of matched pairs needed to win. You have several seconds to memorize as many matching pairs as you can before the cards are turned over. The object is to equal the score you chose. Your score is displayed at the bottom of the screen. 16K.

Jet Bomber

Robert J. Midura **Date:** 1984 **Price:** \$12.00 **Platforms:** TS 1000
Maneuver your jet over the scrolling landscape and through tunnels while you drop bombs on targets and fire missiles at enemy fighters in your path. Missiles from the ground make your mission more difficult, 5 levels.

Jewel Thief

Crystal Microsoft Ltd **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Can you break into the Crystal City Museum and steal the 'Blue Wallaby' diamond without being caught? 16K.

Journey Through the Asteroid Belt

Tri-Soft **Date:** 1984 **Price:** \$6.50 **Platforms:** TS 1000
Pilot your ship to avoid the asteroids. Points are based on your skill. Ship has 3 shields. Each time you hit an asteroid a shield is destroyed and you lose maneuver-

Software

ing power. Score bonus points by shooting asteroids, but you must avoid the debris.

Jumble Bee

Sourceware, Inc. **Date:** 1984 **Price:** \$12.95 **Platforms:** TS 1000
Decypher scrambled word clues, only to find more jumbled clues in search of the "mystery word."

KARTIK

Willcocks Research Consultants **Date:** 1984 **Price:** \$15.00 **Platforms:** ZX81, TS 1000, TS 1500
A crossword card game for 2-8 players. Words scored across, down or diagonally.

Kasino Kraps

Timex Computer Corporation **Model:** 03-4016 **Author:** Gerald Bennett **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Like the real thing. Dice visible at all times, multiple bets possible. 16K.

Keltinor's Keep

Mill Research **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
Dare to challenge this mysterious castle, and you are in for a perilous adventure. The keep is made up randomly of 20 rooms and 2 levels. Various treasures and weapons are in the rooms you search, along with monsters and obstacles which block your way. The computer gives a detailed description of each room and accepts many varied commands. 16K.

Keyboard Tutorial/Turtle Graphics/Home Accounting

Timex Computer Corporation **Model:** 06-3023 **Date:** 1983 **Platforms:** TS 2068
Demonstration tape supplied with TS 2068.

Software

Keys to Gondrun

International Publishing & Software Inc
Date: 1982 **Price:** \$9.95 **Platforms:** TS 1000

A journey beneath the Enchanted Forest in search of the missing keys of Gondrun the Wizard. Can you stay alive and discover the keys? Map the caves as you travel through them, but beware of the nasties lurking there! Program features real-time monster fights at 6 skill levels. There are alternative responses to give a different game every time. 16K.

Keystroke Management

2-Bit Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Four games: Musical Desks, Corner Office, Automation and Go to the Top. Musical Desks: it's more luck than skill to keep your desk when all about you are losing theirs). Corner Office: find your way through the invisible corporate maze to the corner office. Office Automation: will you survive in the brave new electronic workplace? Go to the Top: corporate adventure game with the key to the executive washroom the reward.

Kids on Keys

Knighted Computers **Author:** Spinnaker Software **Date:** 1985 **Price:** \$16.00 **Platforms:** TS 2068

Three games that familiarize children with the computer keyboard as they learn to identify numbers, letters, and words, and associate them with images they see on the screen.

Kindercomp

Knighted Computers **Date:** 1985 **Price:** \$16.00 **Platforms:** TS 2068

A collection of six fun learning games that help young children to improve their reading readiness and counting skills, as well as familiarizing them with the 2068 keyboard. Port of the Spinnaker Software program.

Klingon Wars

Biocal Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000 16K.

Kong

Bob Brown **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

Leap over barrels and climb ladders to make it to the top. Machine code version of the popular arcade game. 16K.

KRAKIT

Artic Computing **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000

Adventure game and treasure hunt. Be the first to crack the puzzle and the \$20,000 prize which actually exists will be yours. Only one prize will be awarded. You have 12 clues. The answer to each is the name of a country, a city or town, and a number.

According to Bill Ferrebee, Gladstone ended the KRAKIT contest in 1984. No one solved the 12 clues but Gary Gogel obtained a 14 page solution document from International Publishing and Software that listed the correct answers.

Krazy Kong

Personal Software Services **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Machine code version of the popular arcade game. Has all the features of the original and is every bit as fast. Try to go up the ladders to save little Jane, and avoid being hit by drums Kong throws at you. The screen changes when you reach Jane. Now crash the support to conquer the Kong and score points as you progress. 16K.

KROK

Brown Cottage Industries **Date:** 1983 **Price:** \$8.85 **Platforms:** TS 1000

Fast action maze game. Intelligent crocodiles (kroks) pursue you through 140 rooms and a 35 room basement in your quest for gold and other treasures, including a sword to kill the kroks. Monkeys, snakes, bats, spiders as well as kroks attack. Single key instant commands; 3

speeds. 16K. A limited version was available for 2K.

Labyrinth

Mindware, Inc. **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000

Pick your maze; from small and simple to complex. The maze is displayed for a few minutes to let you memorize your way through. Then the maze vanishes and you have to find your way just as if you were stuck in a maze. If you get lost, signal for help and the computer will display the maze plan with your position. When you finish, you get a replay of your route. 16K.

Labyrinth

AARDVARK **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

3D graphics, you fight your way through a maze hunting treasures. 16K.

Labyrinth of the Necromancer

Turner, Elcy & Com. **Model:** MSA1 **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Part 1 of the adventure of the wand of Kormantu.

Land the Space Shuttle

Funware **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000 16K.

Land/Air Battle

Funware **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000 16K.

Lander

Robert J. Midura **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Land before you crash or run out of fuel. Three levels, five screens per level. Multiple targets. 16K.

Lander-X

Panero Software **Date:** 1982 **Price:** \$1.50 **Platforms:** ZX81, TS 1000 1K.

Software

Las Vegas Package

Florida Creations **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000

Vegas 21 Blackjack: Plays Blackjack just like Vegas. Double Down, Split Pairs, etc. Lucky 7 Slot Machine: Fully animated three reeled slot. 16K.

Laser Invasion

ZX-Vision **Date:** 1983 **Price:** \$2.00 **Platforms:** TS 1000

Exciting arcade game. 2K.

Laser Wars

EZRA GROUP II **Date:** 1983 **Price:** \$1.80 **Platforms:** ZX81, TS 1000

Fire at the invader. Listing. 1K.

Laser Zone

Quicksilva **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

You're in control of the Zone Gunner. Faced with a choice between prolonged painful death at the hands of an enraged llama or a rapid, glorious death wreathed in laser-fire in 6-space, what could you do but represent your race in an awesome battle of skill and dexterity? One or two players, 30 levels of play.

Leap Frog

Discount Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Letter Logic

Signature Software **Date:** 1983 **Price:** \$11.95 **Platforms:** ZX81, TS 1000

Version of popular game. Improve your logical thinking. Indicates "right on" and "almost." 1K, 2K and 16K versions.

Letter Raiders

Non-Trivial Solutions **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

Seek out and capture the language of man. Render your opponents powerless by capturing them with the cursor. The strategy is to capture each letter of the alphabet on a 24 x 32 grid without recrossing your path. 16K.

Software

Life

Jon T. Passler **Date:** 1981 **Price:** \$1.00 **Platforms:** ZX80

Graphics program; 22x27 world; half second between displays. 1K.

Life

Non-Trivial Solutions **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

Simulation of biological systems, with a high speed 48x64 graphic palette. 16K.

Life

Biocal Software **Date:** 1983 **Price:** \$2.00 **Platforms:** ZX81, TS 1000

Conway’s classic simulation. Watch colonies of life-forms become alive, mutate, and die. Control matrix size, generations. 1K.

LIFE

Artic Computing **Model:** M2.02 **Price:** \$16.00 **Platforms:** ZX80

1/7 second per generation, with demo program. For the 2K ZX80.

Life for the TS2068 v 2.0

McBrine Computer Products **Date:** 1988 **Price:** \$9.95 **Platforms:** TS 2068

See John Conway’s revolutionary pattern-generating game for yourself. 3 times as fast as our original; includes 24x32, 48x64 and 96x128, plus saving and loading.

Loco Motion

Parker Brothers **Date:** 1984 **Platforms:** TS 2068

Video game on cartridge.

LodeRunner

Curry Computer **Price:** \$12.95 **Platforms:** ZX Spectrum

Lords of Midnight

English Micro Connection **Date:** 1984 **Price:** \$9.50 **Platforms:** TS 2068, ZX Spectrum

Overthrow the evil Witchking Doom-dark, who controls the north half of the land

of Midnight, and free the land of Doom-dark’s evil spell of cold.

Lost

Quicksilver **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

You are lost in a clearing surrounded by a forest and mountains with only 5 days supply of food and water. Using your wits, and a club or stone, can you fight the elements, your own hunger and thirst, to reach safety? You must scavenge off the land to help you survive.

Lost Continent

Business Management Specialists **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Adventure game. 16K.

Lost in Space

M. C. Hoffman **Date:** 1982 **Price:** \$11.95 **Platforms:** TS 1000

Steer ship past meteors and enemy ships; land on fuel ship for bonus; status monitor. Moving graphics; flicker-free. 16K.

Lost Island

Games to Learn By, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 2068

You’ve been lost at sea and discover you are out of fuel. A storm carries you through uncharted waters to an island.

Lotto U.S.A.

Knighted Computers **Date:** 1987 **Price:** \$24.95 **Platforms:** TS 2068

Program for picking lottery numbers. Picks numbers based on historical data or a random system that simulates numbered balls that are continuously mixed. Total of seven complete wheeling systems. Compiled and BASIC versions.

Love and Death

Automata Ltd **Date:** 1982 **Price:** \$10.00 **Platforms:** ZX81, TS 1000

Education, conception, birth, Rubik’s cube, on the job, pox, Dr. Death, God. 1K.

Lucky 7 Slot Machine

Florida Creations **Price:** \$1.00 **Platforms:** TS 1000

Lucky 7 Slot Machine: Fully animated three reeled slot. 16K.

Lunar Lander

Italian Connection, The **Date:** 1981 **Price:** \$4.95 **Platforms:** ZX81, TS 1000

1K.

Lunar Lander

Ventamatic Micro Informatics **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Simulation of the game. Two stages of resolution. Smooth motion of the Lunar Module. Selectable levels of gravity and inertia. 16K.

Lunar Raiders

Sinclair Applications **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000

Fly over surface and knock out alien facilities, supplies and ships without being shot down.

Lynchmob

Computer Software Associates **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

A competitive game of skill and strategy for 2-6 players developed from the traditional game of Hangman. Picks turns, keeps scores, and lynches the losers in animated graphics. 16K.

Machine Intelligence Demo

Z-Ware **Date:** 1982 **Price:** \$8.95 **Platforms:** TS 1000

Life forms that actually learn. 16K.

Macro-Life

Silicon Mountain Computers **Author:** Gregory C. Harder **Date:** 1986 **Price:** \$9.95 **Platforms:** TS 1000

Adapted by Gregory C. Harder from the Spectrum program by Toni Baker. High resolution version of Conway’s Game of Life.

Software

Programmed in SRAM HI*RES Extended BASIC. 16K.

Mad Dog Tank Blaster

Thomas B. Woods **Date:** 1982 **Price:** \$6.95 **Platforms:** TS 1000

Play vs computer controlled tank. Move your man, plant mines and avoid the tank. Tank shoots or can run you over. Manual explains moving men, bullets and explosions. Learn to map your display of complex interactive graphics. 16K.

Madame Ruby

Florida Creations **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Artificial intelligence simulation. Ask her anything. She examines your question and gives you an answer which makes it seem like she understands you. 16K.

Make a Face

Knighted Computers **Date:** 1985 **Price:** \$16.00 **Platforms:** TS 2068

Build faces from components and make the face do funny things. Spinnaker Software’s FaceMaker.

Making Treks

2-Bit Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

See the world with variations on adventure games that take you from the calm Pacific to the frosty Himalayas. You may find yourself riding a camel, floating on a hot air balloon, or steaming along on a slow boat to China. The object is to return home before your vacation is over and to have a good time. 2K.

Marbles, Mazes and Sink Holes

Charles Drury **Date:** 1983 **Price:** \$16.00 **Platforms:** TS 1000

Simple, logical, non-destructive family game simulating hand held mazes. 15 levels each with 4 variations give 60 full-size playing screens; from very easy to extremely difficult. All machine code. Automatic clock and time limit enforcement. 16K.

Software

Marine Rescue

International Publishing & Software Inc
Date: 1982 **Price:** \$9.95 **Platforms:** TS 1000

Your ZX81 becomes the command console as a diver descends to the sunken submarine Nautilus to rescue as many of the stranded crew as possible. It's a race against time as your oxygen supply must be replenished. It's also a constant battle against marauding sharks which you can attempt to blast with your laser. 16K.

Marketing

Maranatha **Date:** 1983 **Price:** \$7.95
Platforms: TS 1000

Will you be a millionaire or a bum? The choice is yours. With luck and your choices you can make a million or go to skid row. 16K.

Mars Lander

Mark E. Rogers **Date:** 1982 **Platforms:** TS 1000
Position your cargo ship over your Mars base and land safely. 16K.

Master Mind

Isthmus **Date:** 1984 **Price:** \$7.95 **Platforms:** TS 1000
Strategy game: break the codes. One or two players.

Masterbrain

David B. Scollin **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Computer invents a fiendish code which you must decipher. You are given clues as to how close your guess approximates the five place code. You will be rewarded for doing well and chastised for doing poorly. The solution can be called if you are having trouble. 16K.

MasterColors

Rheesware **Date:** 1984 **Price:** \$12.95
Platforms: TS 2068
Mastermind.

Mastermind

J. M. Yocum **Date:** 1983 **Price:** \$2.00
Platforms: TS 1000
Program listing.

Masterminds

Event Horizon Software **Date:** 1983
Price: \$7.50 **Platforms:** TS 1000
Test your powers of logic and deduction against the computer. Break the secret code in as few moves as possible.

Mastermined

Glassware - D. Glass **Date:** 1983
Price: \$2.95 **Platforms:** TS 1000
Numerical version of the popular logic game. Crack the computer-selected code in fewer than 10 tries. Full display; prompts and instructions. 2K.

Masterthink

Run-It Software Club **Date:** 1982 **Price:** \$11.95 **Platforms:** TS 1000
Play against the computer and it will choose a 1 to 6 digit number then tell you which digits and positions you guess correctly. Play with another person and you choose. 16K.

Matrimony/Noah's Ark

SyncMaster **Date:** 1983 **Price:** \$14.95
Platforms: TS 1000
Two graphic solitaire games. In Matrimony, all cards are displayed face up. In Noah's Ark, only bottom row of cards displayed face up. 16K.

Maxwell's Demon

Andy Longacre, Jr. **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Work against the clock to trap up to 24 bouncing balls in one half of the playing court. Demonstrates certain statistical and thermodynamic principles; offers arcade-like challenges. 2K.

Maze

Computer-Wear Software **Date:** 1983
Price: \$11.95 **Platforms:** TS 1000
A maze game totally different from other maze games because strategy

counts. You are trapped in a series of invisible mazes, each progressively harder. Armed with 3 magic weapons, you must solve each maze before air runs out. 16K.

Maze

Daw Software **Date:** 1983 **Price:** \$9.95
Platforms: TS 1000
You are trapped in a randomly created maze. By finding and using a large variety of items, you can escape through the secret passage, but be careful of monsters in the maze. An animated screen displays all the action. Each game is a new experience with a new maze. 16K.

Maze

Dem Co. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
A 3-D maze game; 4 play options; 9 levels; move count; challenge mode. Prompts with single key entry. Maze generation is random. 16K.

Maze

Biocal Software **Date:** 1983 **Platforms:** TS 1000
Shifting maze. Prints random maze. 1K.

Maze 1.0

Systems and Solutions, Ltd. **Price:** \$3.95 **Platforms:** ZX80

Maze Death Race

Personal Software Services **Date:** 1983
Price: \$14.95 **Platforms:** TS 1000
Your racing car is in a giant maze, only one ninth of which is displayed on the screen. Sold as "Maze Drag Race" by Kopak and Intercomputer. 16K.

Maze Man

Bob Brown **Date:** 1983 **Price:** \$5.00
Platforms: TS 1000
You are pursued by four ghosts in a maze chase. Score by eating stars and dollar signs. 16K.

Software

Maze Racer

Story Software **Date:** 1983 **Price:** \$11.98 **Platforms:** TS 1000
Three-speed car race game in machine language.

Maze-O-Rama

Haymarket Software Co. **Date:** 1983
Price: \$9.95 **Platforms:** TS 1000
Compete for fastest time. New maze each time. 16K.

Maze-O-Treasure

Haymarket Software Co. **Date:** 1983
Price: \$9.95 **Platforms:** TS 1000
See who can score most on computer maze. 16K.

Mazeball

Calliope Software **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 1000
Obstacle bouncing ball game. Seven mazes, high score. 16K.

Mazeman

ABERSOFT **Date:** 1982 **Price:** \$8.95
Platforms: TS 1000
Mazeman scours the maze for food while dodging ghosts that are trying to devour him. A fast action machine language game that reproduces the spirit of the original. 16K.

Mazogs

Bug-Byte Software **Author:** Don Priestley **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
A maze adventure game with fast moving animated graphics. You must escape the maze with the treasure while fighting off the Mazogs, the creatures who live in the maze and are out to get you, 3 levels of difficulty. 16K.

Meal-a-Morph

BARLOG Software **Date:** 1982 **Price:** \$2.00 **Platforms:** TS 1000
Survival in cafeterias. 16K.

Software

Medieval Fantasy

Daw Software **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

Graphically animated adventure game. Test your skill and luck fighting many different kinds of monsters in a crypt. A bandit infested road separates the crypt from the safe town. As you defeat monsters and bandits, you will gain power and confront the more challenging monsters. 16K.

Meelborn

Biocal Software **Date:** 1983 **Platforms:** TS 1000

Computerized version of Mille Bornes. Two cars race toward a 1000 mile goal. Includes flat tires, accidents, running out of gas, stop lights.

Mega Mind

ORBYTE Software **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000

Use logic and memory to decode your opponent's hidden pattern of six shapes in four position. 16K.

Mega-tron

Sikes Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Try to destroy the computer light cycle. Avoid hitting the light trails left behind the cycles, the walls of the game grid, and the cycles themselves. On screen scoring and bonus cycles. 16K.

Megawurm

JPR Software, Inc. **Date:** 1983 **Platforms:** TS 1000

Arcade-like game which exploits the graphics capabilities of the TS/ZX computers.

Merchant of Venus

Timex Computer Corporation **Model:** 03-4018 **Author:** Crystal Microsoft Ltd **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

You must be a skillful trader and pilot in order to succeed. 16K.

Meteor Storm

Golden Stair, The **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

Challenge yourself to command your craft through a storm of interstellar debris- your skills as pilot and gunner will be stretched to their limits. 16K.

Meteorites

Softsync, Inc. **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Long range scanners pick up a vast belt of asteroids drifting on the fringes of the Star System Nolveg I. Suddenly they are upon you. You dodge, swerve, and fire laser beams at them. On screen: six missiles firing in eight directions, wrap around screen. Two sizes of asteroids, scoring and ship count, complete mobility and bonus ship. 16K.

Microbox

Microx **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Micromaze

Sikes Software **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000

Eat the dots and score points while evading the deadly Drone. 11 automated levels of play, so the better you play, the better this game gets. 16K.

Mind Benders

Compuwiz Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Three thinking games. Master Mind: An exciting version of the popular board game. Super Mind : A tougher version for those who enjoy a real challenge. Guess: An enjoyable number guessing game. All games use full screen graphics. 16K.

Mind Bogglers

2-Bit Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Four brain-testing, brain-twisting trials and triumphs. How good are you at left-brain (analytical) and right-brain (spatial) mental gymnastics. Figure out: Sinclair

Towers, Eye-Q, Dots and Spots, Seven Bridges. 2K.

Mind vs. Machine

2-Bit Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Four opportunities to beat the computer. Tic Tac Toe I and II: Basic and advanced variations of the classic game of strategy. Chocolate Truffles: Makes you plan ahead to "take away" the last luscious truffle. Superspy: Gives you a chance to decode secret messages smuggled out from behind the "silicon" curtain.

Mindreader-1

D-RAM Products **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000

Amaze your friends as your computer appears to read minds. Two games MATRIX and CLOCK. 16K.

Mine Field

Bob Woish **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000

Locate and disarm the mine before it goes off. 2K.

Mine Field

Software Development Associates **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Navigate the mine field after one look at that map. Ten levels of difficulty. 16K.

Mined Out

Quicksilva **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

You are presented with a blank field, densely sown with mines. You must get to the other side without blowing up. Level two offers maidens in distress to be rescued; higher levels confront you with things that chase and make you move quickly. Nine levels.

Software

Miner's Revenge

SyncWare Co. **Author:** Steve North **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Get fabulously rich if you crack the mother-load. The old miner's last will, will help you on the way, equipped with a pickaxe, flares, spikes, and a lantern. The 9 markers left by the old miner will guide you to the big vein, but watch out for falls that cause the loss of time and tools. Not a text adventure game; continuous full screen graphics for improved realism. 16K.

Minesweeper

Alvin Albrecht **Date:** 2003 **Platforms:** TS 2068

Inspired by the Microsoft Windows program.

Mini Space Intruder

Hewson Consultants **Date:** 1982 **Price:** \$11.95 **Platforms:** ZX81, TS 1000 1K.

Mini-Cricket

Emvee Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000

Accurately simulates the game of "limited over" cricket. Play against another player or the computer. Input the names of the individual members of your team then decide your team's tactics for each over of the match (whether batting or bowling). 16K.

Mini-Golf

Emvee Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000

Play 9 or 18 holes against another player or the computer. The better your practicing performance, the more consistent your play will become. A different course for each round played. 16K.

Mini-Manufacturing

Emvee Software **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000

Compete against another player or the computer to manufacture a set of 5 orders for 3 different product types. Random

Software

events (e.g., strikes) can disrupt your planned production schedule. Variable program parameters give vast permutations of game challenges. 16K.

Mini-Pak
ROMPAK **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
“Ski-Bum” and “Galaxon” arcade games.

Minigolf
Robert J. Midura **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Graphics display and random creation of each of the 18 holes. Random height of elevated tee, 3 types of variable size hazards, animated ball, splash effect, final score report. Also displays hole number, hole par, shot number, and current score. Distance between tee and hole determines par. Flashing messages for misses and hole in ones. Can play either same course or a new random course. 9 levels of difficulty. 16K.

Missile Launcher
Intercomputer, Inc. **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Your goal is to destroy the enemy’s ammunition, which is stored in five different locations. You have 15 missiles to launch at these targets, and two bonus points for totally destroying it. The destructive power of your missiles increases after each firing. Perfect score is 25. 16K.

Missile Strike
Infinity Research Development **Date:** 1982 **Price:** \$7.95 **Platforms:** TS 1000
Defend against enemy missiles and satellites seeking to destroy innocent cities. You are the commander of a land-based missile defense center. 16K.

Mission Escape
Just Games **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Destroy enemy scout fighters while protecting your evacuation fleet. Your ship has a limited fuel supply and must be refueled

often by any possible means. First part of the Mission: Escape real time graphic adventure series. 16K.

Mixed Game Bag I
Timex Computer Corporation **Model:** 03-4005 **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Offers three games: a bingo number generator, Robot Wars, and bowling. Robot Wars is a computerized adaptation of Mastermind, the board game classic. The object here is to guess a four-digit number within 10 tries, through the process of elimination. Fail, and your robot is demolished. In bowling, the player presses two keys to control the ball, moving it from left to right.

Mixed Game Bag II
Timex Computer Corporation **Model:** 02-4001 **Author:** T. J. Software **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Memory Magic, Concentration, Supermind. Memory Magic: Try your skill and improve your memory. Concentration: Remember the locations of characters the computer shows. Supermind: Decipher the sequence of graphical characters. Five-levels of play. 2K.

Mixed Game Bag III
Timex Computer Corporation **Model:** 02-4003 **Author:** M. Orwin **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Blitz, Rat’s Nest, Snake, Sketch Pad, Cross the Road. Bomb targets (Blitz), trap your opponent (Rat’s Nest) and more. 2K.

ML Asteroids
Mill Research **Date:** 1983 **Price:** \$1.95 **Platforms:** TS 1000
Split the rocks with lasers. Complexity increases as you play. 16K.

ML Raiders
Mill Research **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000
You must line up the approaching ship before he opens fire and then fry him with your lasers. At first one of three different spacecraft comes into view in the distance.

As it gets closer it becomes larger and increases in detail, giving a 3-D effect. 16K.

Monarch
Reston Publishing Company **Date:** 1983 **Platforms:** TS 1000
As ruler of the kingdom you must make decisions about the use of land and what will make your people happy. Make the right decisions and keep your crown; otherwise you lose it. 16K.

Money Machine II
ABBA Soft **Date:** 1988 **Price:** \$12.00 **Platforms:** TS 2068
The ultimate word game based on a popular TV game show, starring lovely Miss Banna Brite.

Monkey Barrels
Panero Software **Date:** 1982 **Price:** \$2.00 **Platforms:** ZX81, TS 1000 1K.

Monopoly
Savage Software **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Old favorite monopoly game. Up to 6 players. The computer tracks properties, bank balances, houses, and hotels owned by all players. A total family game. Your choice of language version: Spanish, British, or American. 16K.

Monte Carlo
Micromega **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 2068
Blackjack and Craps.

Montezuma’s Revenge
Parker Brothers **Date:** 1984 **Platforms:** TS 2068
American version of Panama Joe. Cartridge.

Monty is Innocent
Curry Computer **Price:** \$12.95 **Platforms:** ZX Spectrum

Software

Moon Mission
Sikes Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Land your space craft safely on one of the 4 launch pads. Features: Full graphics display of mountain terrain, launch pads, and lunar cities. Instrument panel assists you in landing safely. 16K.

Morloc Castle
Upstate Labs **Date:** 1983 **Price:** \$9.94 **Platforms:** TS 1000
You must find and enter a secret castle, locate a magic medallion (defeating the wizard in the process), and escape with your life. More than 200 words of vocabulary. 16K.

Mothership
Softsync, Inc. **Author:** Alan Laity **Date:** 1983 **Price:** \$16.95 **Platforms:** ZX81, TS 1000
Drones are pouring down the Zarway, all around you firing deadly lasers. Maneuver to dodge them. Knock off ten and you get a clear shot at the Mothership. Simulates 3-D graphics, one or two players option, on screen scoring. 16K.

Mountain Pilot
Instant Software **Price:** \$19.95 **Platforms:** TS 1000
Earn your wings with this fast paced flight simulator. This is a flight simulation of a mountain pilot. His goal is to bring supplies to a far-off town and return through a treacherous mountain pass. Also gives a realistic air-flight landing simulation. 16K.

Mountain Raider
Golden Stair, The **Date:** 1983 **Price:** \$5.95 **Platforms:** TS 1000
Your mission is to patrol the mountainous regions of Phelld for the demonic craft of the Cyborg. Do not waste your firepower but, if the demon hits you, you walk home. 16K.

Software

Movie Hangman

International Publishing & Software Inc
Date: 1982 **Platforms:** TS 1000
Guess the movie, beat the hangman.

Movie Stuntman

W S M Entertainment **Date:** 1982 **Platforms:** ZX81, TS 1000
Experience the high falls and car crashes, not to mention the agony of defeat.

Mr. Munchee

International Publishing & Software Inc
Platforms: TS 1000
Munch away and avoid the trolls. Three mazes and variable speeds. 16K.

Mugsy

Computer Software Associates **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
You are the boss of a Chicago gang operating a protection racket. Can you survive the rival gangs, the cops, and Nick the Greek? 16K.

Munchees

Quicksilva **Author:** A. Laird **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
Beware of the Munchees. A board creaks in the time lost corridors. A ghostly presence, a rush of wind, a forgotten echo whispering around the house and a chuckle of ghosts rolling forward on cold breezes. Pac-Man clone.

Murder in the Ram

Banta Software **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
Race against the computer and other players to solve the murder mystery with clues given by the computer. Up to 6 players. 16K.

Murgatroyds

Collins Computing **Date:** 1981 **Price:** \$9.95 **Platforms:** TS 1000
Roam around the screen, trying to lure the Murgatroyds into traps. 16K.

Murgatroyds Revenge

Collins Computing **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
The fiendish Murgatroyds are on the warpath again. You must fight off their attack with mines, superglue, decoys, and more. 16K.

Muse-Pak

ROMPAK **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
“Haiku” composes poetry.

Mystery Manor

Games to Learn By, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 2068
Penniless, you are the sole relative of the late Frank N. Stein. As stated in the will, you inherit his house. Ten years of back taxes are due: can you find the money to pay off the taxes before the town auctions the house? Graphic adventure.

Namtir Raiders

Artic Computing **Date:** 1982 **Platforms:** TS 1000
Arcade game; four waves of invaders. 16K.

Naval Command

Koala Softbear **Price:** \$3.00 **Platforms:** TS 1000
Advanced version of Battleship. Listing. 16K.

NBA Picks

Stuart Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Predicts the outcome of NBA games with point spread. 16K.

Nerd!

Arizoftx **Date:** 1983 **Price:** \$13.13 **Platforms:** TS 1000
Play against the computer in this simple board game. 16K.

NFL/USFL Statistical Summary

Robotec, Inc. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Complete schedules, results, team statistics, averages, rankings, division statistics and averages and more. Enter a week’s games and program recalculates all statistics. NFL edition contains data for 1982-83 season and 1983-84 season. USFL edition contains 1983 data.

NFLX Football

SyncWare Co. **Author:** Steve North **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Provides a full-featured football contest for one or two players. Safeties, interceptions, runs, passes, punts, fumbles, and field goals are displayed with machine code graphics. Defensive plays include Blitz, Red Dog, Normal, and Prevent. Includes demo option to continually demonstrate pass and running plays. 16K.

Night Driver

Infinity Research Development **Date:** 1982 **Price:** \$7.95 **Platforms:** TS 1000
Test your driving skills on a desert road. Through difficult turns and blinding curves, find out how good you really are. 16K.

Night Gunner

Digital Integration **Date:** 1982 **Price:** \$4.95 **Platforms:** TS 1000
You peer into the inky black sky from your position as tail gunner in a bomber plane, searching for enemy aircraft. A fighter plane swoops down, you swing your gun into position, line up your sights and fire. Each round gets faster and harder. Features on-screen scoring, high score and ammunition count as well as bonus points. 16K.

Night Gunner

Digital Integration **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068
Arcade game based on WW II scenario. You are gunner and bomber whose task is to defend your plane against enemy

Software

attack and destroy ground targets in 30 different missions. One or two player game.

Converted from the Spectrum version, which was based on the ZX81 version by Digital Integration.

Nightlite

Hewson Consultants **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
You are the pilot of an aircraft with a number of instruments. Instrument landing system (ILS) indicates the line of the ideal glide path and the center line of the runway relative to the aircraft. 10 other instruments. 16K.

Nightmare Park

Macronics **Author:** J. D. S. Cranston **Date:** 1981 **Price:** \$15.00 **Platforms:** TS 1000
Few who enter ever return. Can you outwit the demons and sorcerers who haunt the dreaded Nightmare Park? Confronted by all sorts of ‘happenings’, you’ll be taken to your wits end. 16K.

NIM

Biocal Software **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000

Nim

Computer Software Associates **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
The first player chooses a number of matches and arranges them in 3 piles. The second player then chooses a pile and removes some matches. The first player then removes some matches. Any number of matches may be removed from any pile. The winner is the person (or computer) who removes the very last match. 4 levels of difficulty. 16K.

Noah’s Ark

Brown Cottage Industries **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000
Ultimate nonviolent computer hide-and-seek game. Noah must find 52 animals that may be hiding in more than 7000 bytes of graphics and bring them to the ark before

Software

the flood. Highlights: 4-way scrolling, animals that follow, a flowing river, continuous graphics, single key commands. 16K.

Nowotnik Pak

Reston Publishing Company **Author:** David Nowotnik **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Nowotnik Puzzle, Demolition and Ten-Pin.

Nowotnik Puzzle

Reston Publishing Company **Author:** David Nowotnik **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Watch your computer take a simple pattern and scramble it on the screen. You have to return the puzzle to its original pattern.

Nuclear Reactor Simulator

AB Engineering **Date:** 1983 **Price:** \$12.50 **Platforms:** TS 1000
Fer-Me-Too puts you in control of a 1.3gw power reactor. A course in reactor operation. 16K.

Nuclear Sub

AARDVARK **Author:** Bob Retelle **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
You start at the bottom of the ocean in a wrecked nuclear sub. There is literally no way to go but up. Save the ship, raise her, or get out of her before she blows or starts WW III. 16K.

Number Squares

SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Difficult brain teaser: arrange 81 pieces according to the rules. Billions of possible solutions. Squares moved with arrow keys. 16K.

O-Bliterat & Dire Straits

EZRA GROUP II **Date:** 1983 **Price:** \$2.80 **Platforms:** ZX81, TS 1000
Clear the screen within the time limit. Steer around obstacles. Listing. 1K.

Odyssey in Space

Image Computer Products **Model:** 5111 **Date:** 1980 **Platforms:** ZX80 1K.

Old #1

Lamo-Lem **Date:** 1/1/1981 **Price:** \$2.99 **Platforms:** ZX80, MicroAce
A cassette of familiar programs: dice, Chinese ring puzzle, etc., plus some new ones.

Operation Pheonix

Pheonix Enterprises **Author:** Jim Payne **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000, TS 2068
Strategy game. TS 2068 version has music and high-resolution color graphics.

Orbit

Biocal Software **Date:** 1983 **Platforms:** TS 1000
Maneuver your spaceship into an inner orbit to pick up your cargo.

Orgs & Ogres

JPR Software, Inc. **Date:** 1984 **Price:** \$12.95 **Platforms:** TS 1000
You are in a party of ten fighters to find the gold or kill the dragon. You encounter other monsters: orgs, ogres and kobolds. You must choose whether to fight the monster or run. To win you must get 1000 gold pieces or slay the dragon.

Othello for 1K

Intellectual Games **Price:** \$7.50 **Platforms:** ZX81, TS 1000

Outrider

Prism Microproducts **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Save the mothership. B-side of Alien Rain. 16K.

Pac Rabbit

International Publishing & Software Inc **Date:** 1983 **Platforms:** TS 1000
Pac Man clone. 16K.

Software

chomp on the goblins and gain extra points. With three skill levels. 16K.

Panzer SS

CRC Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Shoot the enemy tanks. 16K.

Parrot

Systems and Solutions, Ltd. **Price:** \$5.00 **Platforms:** ZX81, TS 1000
Given names, actions, and places (or other phrases), it builds funny random sentences. 1K.

Party Games

S & S Company, The **Model:** T1003/T2003 **Price:** \$10.95 **Platforms:** TS 1000, TS 2068
ORACLE, INTELLECT: humorous artificial intelligence.

Party Games for Consenting Adults

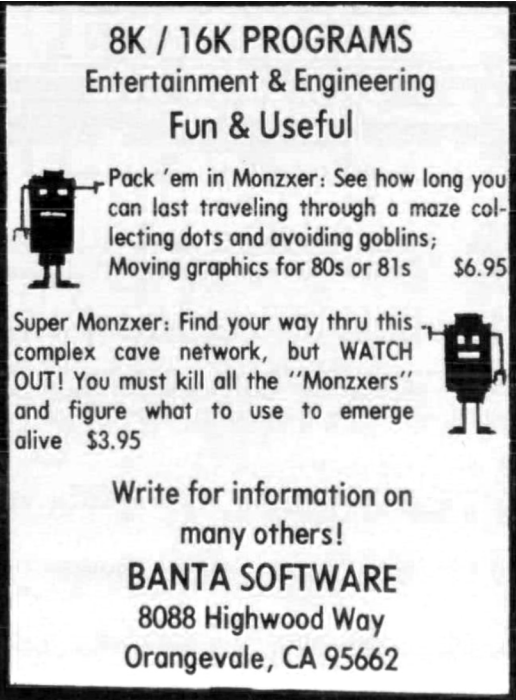
ZOR KHAN Industries **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Five games designed to entertain a gathering of close friends. Strip/Trivia pits your knowledge of trivia against your clothes. In "Body Twister," the computer tells players where to place their hands, feet, etc. on other players. Three others. 16K.

Party Patterns/Towers of Haymarket

Haymarket Software Co. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Party Tricks

Prism Microproducts **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Range of programs with listings supplied to give the novice an insight into Sinclair BASIC. 1K.



Pack 'em in Monzxr

Banta Software **Date:** 1982 **Price:** \$6.95 **Platforms:** TS 1000
Travel through a maze chomping down dots while avoiding goblins, automatically keeps highest current score. 16K.

Pack 16/81/1

Control Technology **Date:** 1981 **Price:** \$7.50 **Platforms:** TS 1000
Air Traffic Control, Invaders, Phone Book, Date 81. 16K.

Paint Maze

Mikro-Gen **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Eat your way through the maze with a variety of different screens. Your path is painted in behind you to keep track of where you have been. Supports Mikro-graph joystick. 16K.

Pakguy

Mill Research **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000
Beware of goblins as you move through this full screen maze, gobbling up dots for points. If you eat a power capsule, you can

Software

Party-Pak

ROMPAK **Date:** 1983 **Price:** \$14.95
Platforms: TS 1000

Wordmaster has baffling vocabulary; Insight reveals secrets by asking innocent questions.

Peckman

Kayde Electronic Systems Ltd. **Date:** 1982 **Price:** \$11.90 **Platforms:** TS 1000

High resolution machine language implementation of Pac Man arcade game. Requires dk'Tronics's 4K High Resolution Graphics ROM.

Peloponnesian War

M. C. Lothlorien **Date:** 1982 **Price:** \$14.00 **Platforms:** TS 1000

Set in Ancient Greece from 431-404 BC, covering the Great War between Athens and Sparta. Your goal is a final victory over the Spartans but you will need all your skill in a combination of diplomacy and military force. 16K.

Penetrator

Timex Computer Corporation **Model:** 06-4002 **Author:** Psion **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 2068

You are about to be sent on a mission through treacherous enemy territory. As commander of the Penetrator, one of the most powerful and advanced ships yet developed, you will travel through torturous landscapes and tunnels on your hazardous expedition. To complete your trek and accomplish your mission, destroy the enemy neutron bomb installation or face certain death against the impassable canyon walls beyond. Once you are able to destroy the installation, return the way you came for yet another (and more deadly) mission.

Penetrator (cart)

Timex Computer Corporation **Model:** 07-4002 **Author:** Psion **Date:** 1983 **Price:** \$39.95 **Platforms:** TS 2068

Never released.

Personal Bio-Rhythms

I. M. S. Enterprises **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Find your peak and critical days. Complete one-month cycle of physical, emotional and intellectual patterns. 16K.

Pete's Factory

Video Arcade **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Pete is a young man whose factory has been taken over by the "Evil Stuarts." Stuart has redesigned the factory and expanded it beyond belief. Your job is to manipulate Pete through the multilevel factory's obstacles and capture Stuart.16K.

Phantom Bombs

Original Software **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000

Bombs from another world are falling, blowing up your defense shield. Shoot the bombs before they detonate.

Pharaohs Treasure

Tensor Technology **Price:** \$10.00 **Platforms:** ZX80

Explore the pharaoh's pyramid for treasure. Traverse the intricate maze searching for ancient treasure. Beware the pharaoh's curse that no one shall come out alive! 1K.

Phaser Wars

Robotec, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

You are patrolling Gamma Sector, home of the confederacy's most remote outpost. Beyond lies the forbidden territory of the Zarons, the most dreaded warriors in the galaxy. With each Zaron you destroy the pace quickens. The computer controls the Zarons and keeps score for two players. Ten skill levels.

Piano Player

21st Century Electronics **Date:** 1985 **Price:** \$15.95 **Platforms:** TS 2068

Convert the TS 2068 into a real time instrument with 3 totally independent sound channels.

Software

Pinball

Timex Computer Corporation **Model:** 06-4000 **Author:** A. Laity **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 2068

High-scoring, fast-paced pinball game includes shooting the ball, bumper action, nudge for those good bounces and flip-action flippers. Free ball is awarded at 10,000 points. High scores "light-up" the score-board.

Pinball (cart)

Timex Computer Corporation **Model:** 07-4000 **Author:** A. Laity **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 2068

High-scoring, fast-paced pinball game includes shooting the ball, bumper action, nudge for those good bounces and flip-action flippers. Free ball is awarded at 10,000 points. High scores "light-up" the score-board.

Pinball Wizard

SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Arcade action pinball game with ball return, shooter, flippers, bumpers, nudge, trapdoors and bonus points. 16K.

Pioneer Trail

Quicksilva **Author:** Marion Stubbs **Date:** 1982 **Price:** \$12.00 **Platforms:** TS 1000

Western adventure based on historical data. Twenty levels of play. Rifle speed uses all keys and is measured against the player's personal response. Sinclair version of Oregon Trail.

Pitfall Fred

Frog Software **Date:** 1983 **Price:** \$3.95 **Platforms:** ZX81, TS 1000

Similar to the Atari video game. Run through the jungle avoiding pits, snakes, and quick sand, while hunting for gold and money. 16K version also has tar pits, fuzzballs, silver and gems. 1K, 2K and 16K versions.

Pick 'em

Stuart Software **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

Program to attempt to predict outcome of national football league games and even the point spread; accepts information available from most daily newspapers. 16K.

Pickle Man

Panero Software **Date:** 1982 **Price:** \$2.00 **Platforms:** ZX81, TS 1000 1K.

Pilot

Hewson Consultants **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Flight simulator. Learn to take-off, land and direction-find from the safety of your computer. Similar to Nightlite but without high resolution graphics. 16K.

Pimania

Software Supermarket **Date:** 1983 **Price:** \$22.00 **Platforms:** TS 1000

Adventure game in which the game provides riddles which if answered correctly will lead you to the time and place where a \$12,000 piece of art is awarded you. The reverse side includes a "free hit single" by Clair Sinclive and the Pi Men. 16K.

Pinball

Sinclair Supply Shack **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Pinball

Timex Computer Corporation **Model:** 03-4010 **Author:** A. Laity **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000

High-scoring, fast-paced pinball game includes shooting the ball, bumper action, nudge for those good bounces and flip-action flippers. Free ball is awarded at 10,000 points. High scores "light-up" the score-board. 16K.

Software

Plane Crash

Beacon Electronics **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000, TS 2068
Adventure game.

Play the Horses

3G Company **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000
Calculate odds on horse races using any computer. Scientifically derived system. WLKY of Louisville, KY, used this system to predict the odds of the 1980 Kentucky Derby.

Play the Market

P & B Software **Price:** \$9.95 **Platforms:** TS 1000
16K.

Play the Slot Machine

Sourceware, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
One-armed bandit displays detailed slot machine graphics and pays off using appropriate odds.

Point-Spreader 83

Brown Cottage Industries **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
More than 20 years NFL experience packed into this point-spread computing program. Factors in injuries, weather, field, rivalries Updated after every game. 16K.

Poker

Basically Software Company **Date:** 1982 **Price:** \$16.95 **Platforms:** TS 1000
No limit, high draw poker. Challenge any 5 (6-handed) of 10 opponents; each plays differently.

Pong

Biocal Software **Date:** 1983 **Price:** \$2.00 **Platforms:** ZX81, TS 1000
Two player pong game. Keeps score. 1K.

Pontoon

Personal Software Services **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Play Black Jack against the computer. You begin with \$200 and with nerve, luck and good judgement you could walk away a winner. 16K.

Pop Star

Gladstone Electronics **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
A question and answer game simulating the exciting world of popular music. Will you make it big and become a star or go broke? 16K.

Popeye

Parker Brothers **Date:** 1984 **Platforms:** TS 2068
Implementation of the arcade game. Cartridge.

Presidential Campaign

Timeworks, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
You have been nominated for the office of the President of the United States. Now the work begins. You must conduct a nationwide campaign to win the confidence and support of American voters. Will you be the next Commander and Chief? A game of skill and strategy for 1-4 players. 16K.

Print Shop

Data-assette **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
For managers interested in testing their business acumen. The game spans a period of 12 weeks and each week the player must make decisions on the number and category of staff to employ, amount and type of paper to purchase, the quotation for each job, and the scheduling of work to the optimum week. Also sold as “Copy Shop.” 16K.

Prisoner

Systems and Solutions, Ltd. **Price:** \$4.95 **Platforms:** ZX80

Software

Program Pack 6

Bug-Byte Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
3-D OXO, Mars Rescue (adventure game). 16K.

Program Pack 7

Bug-Byte Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Zombies, Mount Mayhem. 16K.

Program Pack 8

Bug-Byte Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Word Search, Towers of Hanoi, Germ Warfare, Intercept. 16K

Protector

Cottage Technology **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Fast moving skill game for 2 players. Protect your planet from 4 types of attacking fighters. Variable skill levels: the longer you play, the more challenging it gets. 16K.

Puckman

Hewson Consultants **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
You guide the humanoid around the maze scoring points by eating the food in the maze. 4 guardians controlled by the computer try to prevent the humanoid eating the food by eating him. Magic strawberries are littered around the maze and eating these allows the humanoid to chase and eat the guardians causing them to return to their cell in the middle of the maze. 16K.

Pyramid

AARDVARK **Author:** Rodger Olsen **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
A treasure hunt in a pyramid full of problems. 16K.

Q * Bert

Parker Brothers **Date:** 1984 **Platforms:** TS 2068
Implementation of the arcade game. Cartridge.

Pro Football Forecast

Executive Workshop **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000
Measures each team on 16 points including, coaching, weather, injuries, etc. Lists selected winner and expected point spread. Successfully picked all NFL playoff games in 1983 within 2 points — but totally missed the Super Bowl. 16K.

Pro Golf

Timex Computer Corporation **Model:** 06-4016 **Platforms:** TS 2068
Not released.

Pro Golf

R. D. Brennan **Date:** 1984 **Price:** \$10.95 **Platforms:** TS 1000
18 holes with all the hazards of real golf. Sand traps, rough and 12 clubs to keep you on the fairway.

Program Pack 1

Bug-Byte Software **Date:** 1983 **Price:** \$10.00 **Platforms:** ZX81, TS 1000
8 programs: Digiclock, 9-Lives, Reaction Test, Dice, Gobbler, Patterns. 1K.

Program Pack 2

Bug-Byte Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Four programs: Pontoon, Fruit Machine, OXO, Bio-Rhythms. 16K.

Program Pack 3

Bug-Byte Software **Date:** 1983 **Price:** \$16.00 **Platforms:** ZX81, TS 1000
Astropilot, Automatic Graphic Designer, Roadrace. 1K.

Program Pack 4

Bug-Byte Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Asteroid Belt, Surround (2 versions). 16K.

Program Pack 5

Bug-Byte Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Traps, Sheep, Reaction Timer, Trails. 16K.

Software

QS Asteroids

Quicksilva **Date:** 1982 **Price:** \$15.00
Platforms: TS 1000
High resolution version of Asteroids.

QS Defender

Quicksilva **Date:** 1982 **Price:** \$15.00
Platforms: TS 1000
Faithful reproduction of the arcade game. Supports QS SOUND Board. Moving planetary surface. Up to 84 fast moving characters on screen at once. Ten missiles at once. 16K.

QS Scramble

Quicksilva **Author:** Dave Edwards
Date: 1982 **Price:** \$12.00 **Platforms:** TS 1000
A landscape of mountains, plateaus and valleys slide under you ship as waves of aliens descend, firing from above, and rockets launch from below.

Quest

AARDVARK **Price:** \$14.95 **Platforms:** TS 1000
Quest is played on a computer generated map of Alesia. Your job is to gather men and supplies by combat, bargaining, exploration of ruins and temples and out-right banditry. When your force is strong enough, you attack the Citadel of Moorlock in a life or death battle to the finish.

Quest for the Staff of Light

Horizon Simulations **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
You must recover a lost Staff to its owner before its too late. This adventure has over 80 rooms and a large vocabulary. Adventure accepts any length command. 16K.

Quetzalcoatl

Quicksilva **Date:** 1985 **Price:** \$9.95
Platforms: TS 2068
You are trapped in an Aztec temple and can only escape through the passage risking vengeance from the gods.

Quicksand

Biocal Software **Date:** 1983 **Platforms:** TS 1000
You are traveling through a forest and must detour through a swamp. Can you avoid the quicksand pits?

Quizzer

Discount Software, Inc. **Date:** 1983
Price: \$9.95 **Platforms:** TS 1000
Do-it-yourself quiz.

Race

Biocal Software **Date:** 1983 **Platforms:** TS 1000
Road race game. Can you break the distance record? 2K.

Racing Form Analyzer

Thomas H Nooter **Date:** 1983 **Price:** \$10.50 **Platforms:** TS 1000, TS 2068
Analysis of horse races lets you pick winners before you go to the track.

Raid on Colony Alpha

Turner, Elcy & Com. **Model:** SO2 **Date:** 1982 **Price:** \$9.50 **Platforms:** TS 1000
Bug Eye Monsters have entered the life support dome of Earth's first interstellar colony. You, Captain Trueheart, must lead the few space marines stationed on Alpha. If the invaders are not repelled, Earth's colonization program will end. Fighting under the dome, you must clear the colony of invaders but be careful, if the dome is pierced no one will survive.

Raider of the Ancient Tombs

Pinnacle Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
You are a courageous archeologist searching for treasures in darkest Africa. Watch out for the Mogumba Warriors, ancient booby traps ... and your despicable rival, Merrick. Features combined graphics/text display, eight levels of difficulty, complete instructions in program. Also includes a second deluxe version, with twice as many locations, and an evil demon who relentlessly tracks you through the maze. 16K.

Software

RAM Runner

Timex Computer Corporation **Model:** 03-4008 **Date:** 1983 **Price:** \$12.95
Platforms: TS 1000
Ram other runners without running into an obstacle. 26 levels of play. 16K.

Rampage

Data-assette **Author:** Newsoft **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
PEEK and POKE your way through an adventure right inside a 16K RAM pack. 43 memory locations must be PEEKed and POKEd to make progress. On loading the program, you find that it has been overtaken by the Mad Programmer. You must trap him in a location from which there is no escape. 16K.

Random Scramble

Fusion Micro Products **Date:** 1983
Price: \$13.95 **Platforms:** TS 1000
Word game for 1-4 players. Four levels of difficulty. 2,500 word dictionary. 16K.

Rebel Raider

Maranatha **Date:** 1983 **Price:** \$7.95
Platforms: TS 1000
Invade the Empire, defeat several UFOs with hopes of destroying Dark Faker in the Death S Station. 9 skill levels. 16K.

Rebound

Biocal Software **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000
Paddle ball game.

Recreational Pac

Simplex Software **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000
Biorhythms: computes and plots 4 weeks of your biorhythms. Animals: Popular artificial intelligence learning game.

Red Alert

Softsync, Inc. **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Scramble into your ship, check the computer for status. You have plenty of fuel, bombs, and missiles. Then you are in

the air, dodging on-coming aliens, and skimming above menacing mountains. You score points for destroying alien ships, fuel dumps, and enemy missiles. Fast action machine code game of the arcade type; requires agile skills. 16K.

Red Alert

Curry Computer **Price:** \$9.00 **Platforms:** TS 1000

Redcoats

Sharp's **Date:** 1986 **Price:** \$19.95 **Platforms:** TS 2068

Reddog

JPR Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Card game against the computer. 5 cards to a hand. Beat the top card to win. Win amount bet plus same from the pot. Lost bet goes to pot. 16K.

Return From Space

Intercomputer, Inc. **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Travel in the mysterious outer galaxies and return from space after a long journey. Your fuel supply is limited and you must reach earth and land in the net within 5 rounds. Use the control system of your spaceship to avoid hitting the stars. If a star is hit, you and your ship are destroyed. 16K.

Return of the Jedi: Death Star Battle

Parker Brothers **Date:** 1984 **Platforms:** TS 2068
Program on cartridge.

Reversi

ZETA Software **Author:** Peter Ulrich
Price: \$19.95 **Platforms:** TS 1000
BASIC/machine language, 8x8 square version of Go. 10 skill levels, 3 player modes, fast machine language moves. 16K.

Software

Reversi

Melbourne House **Author:** Ian Logan **Date:** 1982 **Price:** \$14.95 **Platforms:** ZX81, TS 1000

A machine code Othello playing program. Played on an 8 x 8 board with full screen display; allows only legal moves; choice of starting positions. 1K.

Reversi 1000

Human Engineered Software **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000

Play the popular 19th century parlor game against their computer. Includes multiplayer feature. 16K.

Ring of the Goddess, Part 1

Haymarket Software Co. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

You must find the ring of the Goddess, rescue the girl, defeat a witch and keep an evil wizard from getting the ring. There are several problems you must overcome and lots of objects to help you. Over 20 rooms. 16K.

Ring of the Goddess, Part 2

Haymarket Software Co. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Takes over where part 1 left off and contains a whole new set of problems. You must get the ring and the girl to the Temple of Alicia. There is nothing random in this game, every problem has a logical solution. You must solve a few riddles which are offered as clues. 16K.

River Assault

Robert J. Midura **Date:** 1984 **Price:** \$15.00 **Platforms:** TS 1000

Pilot your fighter through waves of enemy missiles. Sink ships; hit enemy fuel depots; fire up to 5 missiles at once; downward scrolling. 4 linked scenarios; 3 difficulty levels; 9 speeds; real time scoring.

River Crossing

Youth Resources Centre, The **Date:** 1983 **Price:** \$1.50 **Platforms:** ZX81, TS 1000

You are caught in a forest fire; your only escape is to swim down the crocodile infested waters of the nearest river. 1K.

Riverside

Biocal Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Steer a Formula-1 car through a tough road course. Different track each time. Also sold as Roadrace.

Road Race

Haymarket Software Co. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

How far can you go before hitting something? 16K.

Road to Riches

Softsync, Inc. **Price:** \$14.95 **Platforms:** ZX81

Roadhog

Lamb's Software, The **Date:** 1983 **Price:** \$7.50 **Platforms:** TS 1000

A three-dimensional, night-driving game where your object is to avoid traffic accidents. Cost per mile is continuously calculated. Accidents are caused by running off the road or being struck by another vehicle. The road will turn as you play and oncoming cars are generated at random intervals. 16K.

Robber

Quicksilver **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

Your objective is a castle dungeon vault where you have it on very good authority that many untold riches are kept in a safe. The guard is constantly patrolling the premises with his powerful flashlight. More problems come to light with a bridge that systematically seems to have sections that just disappear, flooded caves, man eating birds, catacombs, and a few other surprises - enough to make you almost forget what you were trying to steal in the first place.

Software

Roulette

JPR Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Computer chooses random number between and 36. You bet on 1 number, 2 numbers, 3 numbers, high or low, odd or even, or a dozen. Payoff according to odd for bet. 16K.

Roulette Wheel

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000

Gives Las Vegas wheel frequencies for red and black. Listing, 1K.

Rubber Bridge Scorepad

Dunrobin Software **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000

Comprehensive and automatic bridge score-pad. Menu-driven, with statistics page and history of scores each hand (holds up to fifty). 16K.

Rubic's Master

JEU Intelligent **Price:** \$15.00 **Platforms:** TS 1000

Solves Rubic's Cube step-by-step displaying each move by a simple notation system and a 3-D graphic representation. Features a computer cube scrambler, a current cube saver, and a define cube mode allowing the user to enter any cube. 16K.

Rubik's Master

Computer Engineering Services (The Jarrett Company) **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000

Scrambles and solves the cube step-by-step. Displays each move in 3D graphics and simple notation system. 16K.

Rubitz

Mind Games **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000

Play the "cube" on your computer.

Robbers of the Lost Tomb

Timeworks, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

As a special archeological consultant to the CIA, your mission is to recover four sacred tablets from a lost 100-room tomb in Egypt. Inside the tomb you will be confronted by snakes, ghosts, bottomless pits, and mummies, with only determination and cleverness to make your mission a success. 3-D graphics, ten skill levels. 16K.

Robot Tanks

Computer Software Associates **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

The battle has gone poorly. Enemy tanks have you surrounded with an unlimited supply of ammunition. You have one shot left. After you have fired your final round, your tank will become immobile. Your only source of defense is to lure your enemies into shooting one another. 16K.

Rocketman

G. Russell Electronics **Price:** \$9.00 **Platforms:** ZX81, TS 1000, TS 1500

Roman Empire

M. C. Lothlorien **Date:** 1982 **Price:** \$14.00 **Platforms:** TS 1000

Your aim is to conquer the hostile countries surrounding Rome. Build armies, appoint generals and fight campaigns. Takes full account of morale, fighting efficiencies, leadership ability etc. 16K.

Roulette

Data-assette **Author:** Newsoft **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Accepts all legal roulette bets in any combination from one or two players, both playing against the TS 1000 banker. Bet single, double, triple, or quadruple number combinations. High, low; red, black; even, odd; left, right; or middle columns of 12 numbers. 16K.

Software

Run For Your Life

P B Thorware **Date:** 1985 **Price:** \$8.00 **Platforms:** TS 1000

You have been separated from your platoon and are out of ammo. Five enemy soldiers and a malfunctioning robot tank are patrolling the mine sector you wandered into. 16K.

S-Invaders

Frog Software **Date:** 1983 **Price:** \$0.65 **Platforms:** ZX81, TS 1000

1K version of the arcade game. Listing.

Sabotage

Human Engineered Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Maze adventure requiring advanced planning and fast reflexes. 16K.

Sack Man

Koala Softbear **Date:** 1982 **Price:** \$3.00 **Platforms:** TS 1000

Travel through the maze and pick up points. But watch out for the ghosts. Listing. 16K.

Salvo

ORBYTE Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

A game of strategic naval warfare for 2 players. Each has a fleet of battleships, destroyers, and cruisers concealed in the waters of the computer screen. They take turns firing salvos of 7 shots on a coordinate grid in hopes of sinking the opponent's ships. The more ships sunk, the less ammunition available to retaliate with. 16K.

Samurai Warrior

M. C. Lothlorien **Date:** 1982 **Price:** \$14.00 **Platforms:** TS 1000

How could you have fared as a Samurai in 13th century Japan? Face challenges from other Samurai and bandits. 16K.

Satellite War

WMJ Data Systems **Date:** 1984 **Price:** \$5.00 **Platforms:** TS 1000

You command a satellite tracking station with the fate of US and NATO forces relying on your skill. Track down and destroy the enemy's killer satellites. Miss and a major city, state, country may be obliterated.

Scout Fighter

ZETA Software **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Space fighter game that features a 4K star atlas as the moving backdrop during enemy engagements. Stick-on/peel-off custom keys. In-depth booklet explaining both the "game" and the program. 16K.

Scramble

Computer-Wear Software **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000

Educational word game for the entire family; similar to popular word games with one important difference: the computer is a fully automatic moderator between 2 human players and generates jumbled words. First human to unscramble word earns vital points. Invalid words do not count. Selectable game duration/difficulty. 16K.

ScreenMate Programs

Interface Innovations **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Programs for use with the ScreenMate light pen. Programs include: Draw, Doodle, Math Quiz, Master Mind, Tic-Tac-Toe, Word Scramble, Break Out, States and Safe Cracker.

Scyon's Revenge

Timeworks, Inc. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

From the command deck of the Starship Columbia you flash through space as hundreds of stars appear ahead of you and part before you. The infamous Scyons are again crossing the Galaxy, and you must stop them at all costs. You have 3 onboard navigational systems, new super-charged phasers, hyper warp drive, and the most

advanced tracking/view system in the Star Fleet. 16K.

Sea War

Panda Software **Price:** \$9.95 **Platforms:** TS 1000

Each player has three submarines. Higher scores result in more hostile features, including submarines, warships and helicopters. One or two players.

Secrets

Biocal Software **Date:** 1983 **Platforms:** TS 1000

Code/decode messages with a key-word generated cipher.

Semaphore

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** TS 1000

A simplified version of Rubik's Cube for younger children. Listing, 2K.

Serious Cryptology

EZRA GROUP II **Date:** 1983 **Price:** \$3.80 **Platforms:** ZX81, TS 1000

Find the key and decode the messages. 1K.

Shadow of the Unicorn

Mikro-Gen **Date:** 1985 **Platforms:** TS 2068

Adventure game.

Shadowfire

English Micro Connection **Price:** \$9.50 **Platforms:** TS 2068, ZX Spectrum

Locate and rescue Ambassador Kryxix, apprehend and capture General Zoff and capture or destroy the starship Zoff V.

Shark-Hunt

Biocal Software **Date:** 1983 **Platforms:** TS 1000

Chase a man-eating shark, trap it in your nets. Avoid the rocks, old tires and other snags.

Software

Shark's Treasure

Softsync, Inc. **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Takes place in deadly shark infested waters which guard fabulous riches hidden in the wreck of a sunken pirate ship. You must find the treasure and escape unscathed from the jaws of death. 16K.

Shell Game/Number Maze

International Publishing & Software Inc **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Shell Game: Watch the "Hustler" move the shells. Try to keep track of the "pea." Bet and guess. Number Maze: Computer version of the pocket puzzle. Move the number squares one space at a time until they are in order. 16K.

Ship of the Line

RAMEX International **Date:** 1982 **Price:** \$24.95 **Platforms:** TS 2068

Shoot Out

International Publishing & Software Inc **Date:** 1982 **Platforms:** TS 1000

How fast are you "on the draw?"

Shootist

EZRA GROUP II **Date:** 1982 **Price:** \$2.00 **Platforms:** ZX81, TS 1000

Shooting gallery. Listing. 1K.

Showdown

Game Room, The **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

Gunslingers of the old West. 16K.

Simulations

Image Computer Products **Model:** 5201 **Date:** 1980 **Platforms:** ZX80 1K.

Sinclair Destroyer

Frog Software **Date:** 1983 **Price:** \$0.90 **Platforms:** TS 1000

Shoot the enemy warships. Listing. 16K.

Software

Sink the Sub

Bob Woish **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000
The enemy sub is cruising in one of 10,000 possible locations in the ZX Sea. Your mission is to follow directional clues, track down the sub, and blow it out of the ocean. Compete against yourself or others for best score. 2K.

Six Pack

Syber, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Word Juggler, Electro-Sketch, Space Dodger, Scrambler, Guessing Game and Spiral Spots. 2K.

Slalom

JRS Software **Price:** \$2.95 **Platforms:** ZX81
Slalom events always draw great crowds to the ski resorts and the T.V. cameras are never far behind. Skier is under your control and his success in negotiating the slalom posts and achieving a fast time relies entirely on your skill with the ZX81 keys. 16K.

Slides and Ladders

Computer Software Associates **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Each player begins in the cellar of a mansion and must work his way through 40 rooms. The player to reach the 40th room first is the winner. Up to 4 players. 16K.

Slot

J.L.K. Software **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000
Graphics simulation of a slot machine. Press any key to pull the handle and watch cherries, lemons, watermelons, oranges, bells, and bars appear in the window. 16K.

Slot Machine

Bronder Entertainment **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
Changing symbols give a sense of spinning wheels. Over 100 word vocabu-

lary; 24 moving random comment statements. 16K.

Slot Machine

JPR Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Las Vegas style game. 3 random figures appear in the window. Start with a generous supply of money; play to increase it. 16K.

Slots

W S M Entertainment **Date:** 1982 **Price:** \$5.00 **Platforms:** ZX81, TS 1000
Graphic slot machine with live action lever movement.

Slots

International Publishing & Software Inc **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Here is your chance to beat the ‘one-arm bandits’. Slots lets you choose 5 cent, 10 cent, 25 cent, 50 cent and even \$1 machine. Each machine has six sets of different graphics and pay according to the number of coins you played. Excellent, striking graphics and lots of fun and excitement. 16K.

Slots

Frog Software **Date:** 1983 **Price:** \$0.55 **Platforms:** ZX81, TS 1000
Simulates dollar slot machine. Listing. 1K.

Smart Reversi

C. W. Percival **Price:** \$6.00 **Platforms:** ZX80
Play the classic game against the computer. Uses a very strong move algorithm extracted from a much larger program. Game board display.

Smuggler’s Cove

Quicksilva **Date:** 1983 **Price:** \$19.90 **Platforms:** TS 2068
It’s 1753 and you are on a hunt for Blackbeard’s famous treasure, hidden in a

complex of caves on the north Cornish Coast.

Snake

ZETA Software **Date:** 1983 **Price:** \$12.45 **Platforms:** TS 1000
Machine language game with 65,000 possible combinations of snake-speed and mouse freeze time. The object is to guide the snake, eat mice, and avoid walls. 16K.

Snake Eyes

SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Dice game. Player rolls dice, removed number equal to total, trying to reveal snake.

Snake Eyes

2-Bit Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Odds On: see just how random the random number generator really is. Roulette: place your bets; you can win this two-player game by chance. Loaded Dice: the “house” has fixed this game, figure out how. Black-jack: figure the changing odds to beat the computer at 21.

Snakebite/Battle

CLEVA Computer Ware **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Eat the snake before it eats you. Battle: demanding game of military strategy for 1-4 players. 16K.

Snakes Alive

Apropos Technology **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000
Arcade type snake games. You must evade, box in, capture or destroy. 16K.

Snare

Biocal Software **Date:** 1983 **Platforms:** TS 1000
Corral a wild stallion. Try to encircle him in the minimum number of moves.

Software

Sniper

Biocal Software **Date:** 1983 **Platforms:** TS 1000
A randomly moving target pops in and out of view. Hit it before it disappears. 1K.

Solitaire

Biocal Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Las Vegas version. Standout layout is dealt with remaining deck dealt face up over last 6 columns.

Sorcerer’s Castle

Mikro-Gen **Price:** \$7.95 **Platforms:** TS 1000

Space Asteroids

Mikro-Gen **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Simulates one of the most popular arcade games around. Supports Mikrograph joystick.

Space Attack and Bomber

Mill Research **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
16K.

Space Base Attack

WMJ Data Systems **Date:** 1984 **Price:** \$8.00 **Platforms:** TS 1000
Protect your space base from the aliens. Alien gives one last chance to crack his code.

Space Battle

Funware **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
16K.

Space Challenges

Panero Software **Date:** 1983 **Price:** \$7.25 **Platforms:** ZX81, TS 1000
Five arcade-action games. Includes Defense Wave, Tempestuous Battle, Zap-It!, ICBM Barrage and Lander X. 1K

Software

Space Commando

Softsync, Inc. **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
In this challenging adventure game, the amalgamation of friendly planets has commissioned you to infiltrate Zircon 12, a space colony overtaken by Renegade Androids. You must penetrate the alien security forces and render them defenseless so the Space Fleet can land. 16K.

Space Cruise

Dennis Young **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000
Maneuver your ship through different types of asteroids; points and graphics; full instructions. 2K.

Space Defender

Personal Software Services **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
A strategy game with graphic star-map. Defend your space station against enemy missiles. 16K.

Space General

EZRA GROUP II **Date:** 1983 **Price:** \$1.80 **Platforms:** ZX81, TS 1000
Starship vaporizes aliens with cannon fire. Listing. 1K.

Space Gunner

EZRA GROUP II **Date:** 1983 **Price:** \$1.80 **Platforms:** ZX81, TS 1000
Use two fingers to shoot down space ships. Listing. 1K.

Space Gunner

Horizon Simulations **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Fly through complex space maze attacking fleets of hostile invaders. 16K.

Space Intruders

Hewson Consultants **Date:** 1981 **Price:** \$11.95 **Platforms:** TS 1000
Space Invaders clone. Defend your position with three laser guns from a 40 alien ship squadron. 16K.

Space Intruders

Hewson Consultants **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 2068, ZX Spectrum
Features 3 lives, highest score to date, hall of fame, 5 levels of play, mother ship and extra aliens, and descending asteroids.

Space Invaders

Macronics **Price:** \$20.00 **Platforms:** ZX80
Machine code, ‘flicker free’ graphics.

Space Invaders

Mikro-Gen **Price:** \$7.95 **Platforms:** TS 1000
Implementation of the arcade game.

Space Invaders

ZX-Guaranteed **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
Machine code version of space invaders with on screen scoring, bonus mother ship, etc. 4K.

Space Invaders

DK’tronics **Date:** 1982 **Price:** \$11.90 **Platforms:** TS 1000
High resolution machine language implementation of the arcade game. Requires dk’Tronics’s 4K High Resolution Graphics ROM.

Space Raid/TS Destroyer

Softsync, Inc. **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Two fast moving graphics games. Space Raid: With five laser bases, you fire away at the giant alien spaceship until you hit the alien where it really hurts; 10 levels of play. TS Destroyer: On enemy turf you shoot the enemy warships while avoiding guided missiles and meteors; 30 levels of play. 2K.

Space Raiders

Timex Computer Corporation **Model:** 06-4011 **Author:** Psion **Date:** 1983 **Platforms:** TS 2068
Color Space Invaders clone.

Space Raiders and Bombers

Sinclair Research Ltd. **Author:** Psion **Date:** 1982 **Price:** \$8.95 **Platforms:** TS 1000
Space Invader clone and bombing mission games. 16K.

Space Treasures

Haymarket Software Co. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Collect all the jewels you can. 16K.

Space Trek

Softsync, Inc. **Price:** \$14.95 **Platforms:** ZX81

Space Trek

Bug-Byte Software **Price:** \$12.00 **Platforms:** TS 1000
You trek across the galaxy in search of Klingons to zap with your phasers and photon torpedoes. You have long and short range scanners to help you find them, star bases for refueling, and witty comments from the crew. 16K.

Space Trek

Melbourne House **Author:** Neil Streeter **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
You are in command of the Starship Endeavor and the Galaxy, made up of 64 sectors, is being invaded by Drakons. Your mission is to seek them out and destroy them before time and fuel run out. 5 skill levels. 16K.

Space Trek

Savage Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
The enterprising captain of the starship is out to destroy the fleet of Klingons. You have limited energy and torpedos for the battle. Energy is used by your shield for

Software

protection. Radar scan printout available. The enemy is aggressive, so beware. 16K.

Sparks!

Michael B. Williams **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Rescue people from the 100-story skyscraper fire. Multiple screens and difficulty levels. 16K.

Special Game Collection

John Riggs **Date:** 1983 **Price:** \$25.00 **Platforms:** TS 1000
Farmyard Flying, Go-Boom, and Highway, each on its own cassette.

Special Situation Selections Program

Compusport **Date:** 1983 **Price:** \$35.00 **Platforms:** TS 1000
Predicts winners of NFL games 75% of the time. Second program predicts game score. 64K.

Speed Snake

International Publishing & Software Inc **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Snake eats nuts and grows. 16K.

Spider Case

Glassware - D. Glass **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
An action graphics game with seven full-screen rooms. You must move safely through each room, avoiding trained spiders and the webs they leave. Your next room will have one more spider and one fewer escape door than the one you are in now. Escape all the spiders and webs through all seven rooms to win. 16K.

Spider Cave

Story Software **Date:** 1984 **Price:** \$11.98 **Platforms:** TS 1000

Spinner

EZRA GROUP II **Date:** 1982 **Price:** \$2.00 **Platforms:** ZX81, TS 1000
Like Rubik’s cube. 1K.

Software

Split-A-Stack

EZRA GROUP II **Date:** 1982 **Price:** \$2.00 **Platforms:** ZX81, TS 1000 1K.

Square

2-Bit Software **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

This program could replace the cube. It can be played as a solitaire game or contest with your friends. Many levels of play. You can rerun the move using the right answer to see how it would turn out. Scores are printed at the end. 2K.

Squares and Crosses

William Don Maples **Date:** 1982 **Price:** \$6.95 **Platforms:** ZX81, TS 1000
Kaleidoscopic simulations for the ZX81.

Star Battle

Timeworks, Inc. **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000
As captain of the Starship Columbia, you must save Earth from the infamous Scyons. Your ship is equipped with warp and hyper light drive, phasers, and photon torpedoes. Their capabilities are reduced each time your ship is hit by enemy fire. Can you stop the enemy cruiser before the Scyons plunder Earth? 16K.

Star City

Lamb’s Software, The **Date:** 1983 **Price:** \$7.50 **Platforms:** TS 1000
As the pilot of an inter-colony star cruiser, your mission is to fly through the colonies while logging as many light years as possible. Hindering your progress is the space junk of the colonies jettisoned dynamically into your path. The junk must be avoided by your cruiser or that excursion will be ended. 16K.

Star Duel

D-RAM Products **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Deadly duel between you and an unpredictable enemy scout ship that has intruded into Earth Council space. 16K.

Star Hunter

Zebra X-Ray Software **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
The fate of an entire interstellar empire depends on your success. Traverse many locations on several worlds, each in a different star system to recover an artifact. 16K.

Star Search

Brown Cottage Industries **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000
Space saga among the stars. Shoot down flying saucers, explore unknown worlds, locate and find your way through a ghost ship. Inverted graphics create night-time sky. 4-way scrolling, high speed space travel, saucer shoots, continuous graphics, single key commands. 16K.

Star Trek

People’s Software Supply **Platforms:** TS 2068

Star Trek

Gladstone Electronics **Price:** \$9.95 **Platforms:** ZX81

Star Trek

Personal Software Services **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
You are in command of the S.S. Enterprise and at war with the evil Klingons. 16K. Sold as Star Trekker by Kopak.

Star Tron

George R. Cartron **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 1000
Challenging space-war game in which you defend your sector from the evil alien forces. Shudder as the enemy dispatches their computerized mutant intruder ships to your sector, or defeat them and square off with the sinister star camouflage ships. 15 levels.

Star Venture

DSBC **Date:** 1982 **Price:** \$4.95 **Platforms:** TS 1000
Seek out and destroy enemy vessels to move up in Star Fleet ranks.

Star Voyage

Discount Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Star Wars - The Arcade Game

Parker Brothers **Date:** 1984 **Platforms:** TS 2068
Arcade shooting game. Cartridge.

Starcommand/Masterchess

Anglo-Southern Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Star Trek clone and chess programs, both in machine language. 16K.

Starfire

Quicksilva **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068
Rid the galaxy of the Ztardan Cruisers. A game of strategy and skill. You are the commander of the only remaining Earth Space Agency ship in the entire galaxy. The rest of the fleet has been wiped out by a powerful alien force leaving you to navigate the entire galaxy and destroy the alien fighters single handed.

Starhike

Banta Software **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
Battle hostile warships on four levels of difficulty. 16K.

Starion

English Micro Connection **Price:** \$9.50 **Platforms:** TS 2068, ZX Spectrum
Multi-dimensional 243-zone space-time travel simulation requiring reflex skills, analytical powers, stamina and a keen sense of adventure.

Starquest

International Publishing & Software Inc **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
You search the galaxy for a habitable planet for colonization, but discover that they are few. You do find a host of planets of great mineral wealth. You can be caught in the gravitational pull of massive black holes or come out of hyperspace beside a

Software

star about to go supernova. You run the gauntlet of vast meteor storms and are attacked by hostile aliens. If you survive all this, you are rewarded with a paradise planet, a New Earth. 16K.

Starship Crisis/Planet Quiz

D-RAM Products **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
In Starship Crisis, knowing the facts about the solar system is all that can save you. Planet Quiz is an educational quiz game on our solar system. 16K.

Starship Invasion

Computer-Wear Software **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000
You are the captain of the U.S.S. Entropy. Destroy 3 invisible enemy photon torpedo batteries on a vital mining planet. You control fully-operational phasers, warp drive/shields. Realistic graphics and total mobility. Computer rates your starship abilities. 16K.

Starship Trojan/Princess of Kraal

CLEVA Computer Ware **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Starship Trojan: Pit your wits against the dangers of outer space and try to save your damaged space craft. Princess of Kraal: Face the monsters hiding in the underground complex to find the treasure and save the princess.16K.

Start-Rek

VP Hosey **Date:** 1988 **Price:** \$9.00 **Platforms:** TS 2068
Face a conglomeration from the series, films and books with UDGs and sound effects. You are the Captain as the ship is confronted with various scenarios which you must resolve. Ten screens, seven levels of play, no two sessions alike. Use the ‘Kirk Alternative’ as you command phasors, photon torpedoes, warp drive, impulse power, shields, etc.

Software

Startrack/Fungaloids

CLEVA Computer Ware **Date:** 1982
Price: \$9.95 **Platforms:** TS 1000
Startrack: Use graphic photon torpedo attacks to kill off the highly mobile Klingons. Fungaloids: Save civilization by bombing the ever-multiplying fungus. 16K.

STARTREK

Artic Computing **Model:** G4.04 **Price:** \$13.00 **Platforms:** ZX80
All the features of most larger games. For the 4K ZX80.

State Capitols

Frank Lockhart **Date:** 1985 **Price:** \$9.95 **Platforms:** TS 2068
Tutorial, multiple choice.

Stock Market

Biocal Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Play the stock market at home without investing a cent. Lets you buy and sell various stocks. Learn at your own pace the details of various stock market functions such as buying on margin, short-selling, options to buy via warrants; learn and practice proven strategies; test your strategies.

Stock Market Game

Timex Computer Corporation **Model:** 03-4011 **Author:** Russell Klein **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Play the market, win if you accumulate \$50,000. This realistic simulation lets you analyze information, buy and sell stocks, take out and pay off loans and win. 16K.

Stock Market Simulator

Timex Computer Corporation **Model:** 06-4010 **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068
Make millions or wind-up in bankruptcy playing the stock market. Fascinating game uses graphics to plot prices. You decide to buy, sell or borrow. Up to 10 players can play simultaneously.

Stocks and Shares

Personal Software Services **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Take on Wall Street. Prices are affected by trade slump, takeover bids, recessions and more. 16K.

Storm Lander 3

SyncWare Co. **Author:** Steve North **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Make an emergency landing at Denver's Stapleton Airport in your commercial airliner, during a thunderstorm. Three screens of graphics show your progress in avoiding storm clouds. other aircraft, mountains, and downtown Denver, while homing in on navigation beams for a safe descent to the runway and finally taxiing to the terminal. 16K.

Stormer

Mikro-Gen **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Incredible animation and response. Supports Mikro-graph joystick. 16K.

Straits of Hormuz

Executive Workshop **Date:** 1985 **Platforms:** TS 2068
Find and box in as many mines as you can.

Strategy at Sea

Robert J. Midura **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Two games: Convoy and Sub Hunt. Convoy is a shooting gallery type game; your sub has 20 missiles to attack a 15 ship convoy. Targets pass in either direction at various distances from your sub. Graphic explosions, 5 levels of play, 5 types of ships, score shows all ships sunk. Sub Hunt: Your destroyer must track down and sink 5 nearly invisible subs before they sink your 5 fleet ships or your destroyer. Watch out for mines and collisions with your own ships. Graphics display of ocean grid, fleet ships, mines, depth charges and explosions. 16K.

Strategy Football

Timex Computer Corporation **Model:** 03-4015 **Author:** Gerald Bennett **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Strategy football is an exciting challenge for all. Features safeties, QB sacks, interceptions, points, field goals, big plays and losses, and kickoff return. Five-offensive and four-defensive plays are offered. 16K.

Strategy Pak

Reston Publishing Company **Date:** 1983 **Price:** \$19.90 **Platforms:** TS 1000
Timeware Chess and Casino Pak 1.

Strip Poker

Friendly Computer **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
The traditional game, improved and computerized. For 2 or more players. The computer deals the cards, records the bets, announces the winner, guides the players through the game, and does all record-keeping. 16K.

Sub Commander

Bronze Star Software **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000
Can you survive to become an admiral in the Bronze Star Navy? You give all the commands. The fate of your ship and crew is entirely in your hands and mind. 16K.

Sub Search

Lamb's Software, The **Date:** 1982 **Price:** \$6.00 **Platforms:** TS 1000
Naval defense game in which you are the surface vessel. Play choices are "Attack Level," "Ocean Depth," and "Visibility." An enemy submarine and aircraft are attacking you with torpedoes and bombs. You fight back with depth charges and anti-aircraft guns. 16K.

Subhunter

Systems and Solutions, Ltd. **Price:** \$10.00 **Platforms:** ZX81
Live action game of submarine warfare. You are hunter-killer of elusive submarines.

Software

Since your torpedoes are slow and the targets are rarely detected, you must predict the sub's course. 1K.

Submarine

Italian Connection, The **Date:** 1981 **Price:** \$4.95 **Platforms:** ZX81, TS 1000
1K.

Submarine

Intercomputer, Inc. **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Take the challenge of being the commanding officer of the U.S.S. Subfinder. Intelligence has reported 5 enemy subs are off our coast. Track them down with your sonar which you can use 3 times for each sub. Try to hit the sub with one of your 10 mines, but once you drop a mine they will know your location and will fire torpedoes. 16K.

Submarine Game

Asia Tsucho Co., Ltd. **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
You are the submarine itself and must destroy a destroyer flotilla by using two right/left cursor keys move your submarine. The higher scores you obtain, the more pleasure you will surely feel. 16K.

Subspace Striker

Quicksilver **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
You are commander of the Swordfish, a subspace striker, the most feared class of attack craft in the galaxy. Your mission is to disrupt the Federation space lanes, to sever their vital supplies. You are likely to be attacked if you miss with your torpedoes, but even if you hit you must watch out. 16K.

Sunken Treasure

Crystal Microsoft Ltd **Price:** \$19.95 **Platforms:** TS 1000
You have just discovered the wreck of the ocean liner S.S. Crystal Princess. Can you brave the dangers within her hull and salvage the valuables still inside her? 16K.

Software

Super Invaders

Computer Software Associates **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Negotiations have ended. Now comes a show of strength. 16K.

Super Invasion

Melbourne House **Author:** Beam Software **Date:** 1982 **Price:** \$14.95 **Platforms:** ZX81, TS 1000

Cruel and crafty invaders have been spotted in battle formation ready to attack your ship just below them. You must shift quickly and skillfully from left to right as you return their fire, but be careful because they are accurate. 3 skill levels. 1K.

Super Monzxr

Banta Software **Date:** 1982 **Price:** \$3.95 **Platforms:** TS 1000

Find your way through this complex cave network but watch out: you must kill all the “monzxers” and figure what to use to emerge alive. 16K.

Super Slide

SyncWare Co. **Author:** Steve North **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

You are in the 1988 Olympics bobsled event. Pick up points while avoiding skid-patches, walls, ruts, and the course boundary. If you pass the qualifying run, you compete in two heats. Your score on both runs places your final position in a field of over 80 competitors. You must be very good to win the gold medal. Practice in the DEMO mode, which continually cycles a new course. 16K.

Super Spy

RAMEX International **Model:** 1982 **Price:** \$24.95 **Platforms:** TS 2068

Super ZX80 Invasion

Softsync, Inc. **Price:** \$14.95 **Platforms:** ZX80, MicroAce, ZX81

Space Invaders clone. 1K and 2K versions.

Superchess

Softsync, Inc. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Ten levels of play; tactical or positional evaluation; analyze feature allows you to set up and/or change a position. Store of standard openings; up to 15 previous moves displayed. Will recommend moves. Self play allows you to watch Superchess play against itself. 16K.

Supermastermind 1000

Mind Games **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000

New twist on a familiar challenging game.

Supermaze

Timex Computer Corporation **Model:** 03-4006 **Author:** Greg Harvey **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Navigate your way through a 3D maze with trap doors, gold bars, marker stones and a compass. Ten separate mazes, with up to four options each. 16K.

Superstar Baseball

Apple Pie Software **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

How well would Babe Ruth have hit against Steve Carlton? Find out with Superstar Baseball. Manage teams made up of superstars from the past and present. Use real baseball statistics. Computer updates stats after each at bat. Play one game or series.

Supplements to 18 Hole Golf

Robert J. Midura **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Courses 4, 5, 6 on one cassette; 7, 8, 9 on one cassette. Courses 8 and 9 feature unlabeled graphics terrain items and more complex holes. Courses 8 and 9 offer more terrain items per hole and are recommended for advanced players. 16K.

Swordfight

Timex Computer Corporation **Model:** 06-4003 **Platforms:** TS 2068

Not released.

Swordfight (cart)

Timex Computer Corporation **Model:** 07-4003 **Date:** 1983 **Platforms:** TS 2068

Synk-Snake

F. A. Burr **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

Challenging game of skill and strategy. 16K.

Tac-Tix

Biocal Software **Date:** 1985 **Price:** \$10.00 **Platforms:** TS 1000

Similar to NIM.

Tai

Personal Software Services **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

In any other time or galaxy, the dust ball of the world called Tai would have been quite unimportant. Time changes and the entire civilization will be betrayed. You have been chosen to defend Tai. The galactic future depends on you. 16K.

Tailgunner

Personal Software Services **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

You control the tail-gun of a rebel cruiser as the Imperial fleet pursues. 16K.

Talking Biorhythm for TS2068

Tad Painter **Model:** TA68 **Date:** 1984 **Platforms:** TS 2068

Study biorhythms with this talking program. Plots physical, emotional, and intellectual graphs for any time in the future or past for any person. Can help you learn to predict your peaks and lows. Verbally prompts for dates and announces number of days lived.

Software

Talking Poker

Research in Speech Technology (R.I.S.T.) Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Game cartridge. Requires R.I.S.T. Parrot Speech Synthesizer.

Talking Space Zap

Tad Painter **Date:** 1985 **Price:** \$16.95 **Platforms:** TS 2068

Zap as many enemy ships as possible without running out of energy. Verbal messages let you know how you are doing. There are ten levels of play ranging from very easy to very difficult. Uses joystick or keyboard to aim and shoot lasers. Secret tactics let you gain an advantage, if you can figure them out. Sound is heard through the TS 2068’s internal speaker or through the MIC jack. Requires no additional software or hardware.

Tangle4

Willcocks Research Consultants **Date:** 1984 **Price:** \$15.00 **Platforms:** ZX81, TS 1000, TS 1500

A strategy game for 2-4 players. Uses board with hidden random directions of movement revealed by pieces. Will test your ability to think ahead.

Tank Trap

International Publishing & Software Inc **Date:** 1982 **Platforms:** TS 1000

Destroy enemy planes and land mines.

Tape (1) Games

Roman Software **Date:** 1982 **Price:** \$8.00 **Platforms:** ZX81, TS 1000

Lunar Lander and more. 8 programs. 1K.

Tapper

Curry Computer **Price:** \$12.95 **Platforms:** ZX Spectrum

Software

Tarot
Timex Computer Corporation **Model:** 03-4017 **Author:** Computer Phood **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Full 78-card Tarot deck, graphic representation of the 22 major arcana cards. Computer reads and explains each card of your fortune. 16K.

Tee
Robotec, Inc. **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 1000

Tempestous Battle
Panero Software **Date:** 1982 **Price:** \$2.00 **Platforms:** ZX81, TS 1000 1K.

Ten Exciting Programs for the ZX81: 1K
Softsync, Inc. **Price:** \$14.95 **Platforms:** ZX81

Tennis
Just Games **Date:** 1982 **Price:** \$9.00 **Platforms:** TS 1000
Play against the computer. 16K.

Terror from Mars
Frank Lockhart **Date:** 1985 **Platforms:** TS 2068
1939 Earth technology struggles to repel Martian invasion.

The Assassin
JPR Software, Inc. **Date:** 1984 **Price:** \$12.95 **Platforms:** TS 1000
The monarchs of the land are being assassinated and the terrorized king has hired you (the assassin) to eliminate the source of distress. Graphic fantasy; offers perplexing riddles during real time playing. Requires strategy.

The Board Show
Sourceware, Inc. **Date:** 1984 **Price:** \$12.95 **Platforms:** TS 1000
Answer challenging questions in a game show format.

The Cambridge Collection
Richard Francis **Date:** 1981 **Price:** \$10.00 **Platforms:** ZX81, TS 1000
Book or cassette of 30 programs, including: Fortress, Balloon, Odd Man Out, Lunar Landing, Master Code, Orbital Invaders.

The Challenger I
Timex Computer Corporation **Model:** 02-4002 **Author:** Raymond Fowkes **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
In Amazer, enter the maze from the top and work your way down to the bottom without being captured by one of the robots. 10 levels of player ability. In Tic-Tac-Toe, match your skill with the computer. Mislisted as “Challenger II” in the special order form in Ramblings n4. 2K.

The Chess Player
Platforms: TS 2068
Six skill levels with varying response times. A good beginner’s program, because the computer can be beaten in the lower skill levels,

The Company
W S M Entertainment **Date:** 1982 **Platforms:** ZX81, TS 1000
The ultimate CIA adventure game of espionage and terrorism.

The Crown
Games to Learn By, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 2068
The crown has been stolen by an evil wizard. You must restore the crown to the people. Adventure game, traveling through a medieval castle, caverns and secret passageways.

The Dark Empire
JPR Software, Inc. **Date:** 1984 **Price:** \$12.95 **Platforms:** TS 1000
You are commander-in-chief of the rebel nobles on the planet Rion. Can you liberate your forces from your stronghold and overthrow the tyrant Pyrinx? If you can free Rion, can you help free the Milky Way

from the insidious clutches of the Dark Empire?

The Dealer’s Den
WMJ Data Systems **Author:** Timothy Kessler **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068
Poker and Draw Poker with animated graphics.

The Desperate Herd
Golden Stair, The **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
The desperate herd roams a hot torrid plain, grazing on the patchy brush, always seeking more until they find it or starve. They reproduce only if they can eat enough. The rains come bringing thick vegetation, but the herd’s gluttony leads to a population explosion—then famine, and the beasts starve in droves. You control metabolism and energy requirements of the beasts and growth and food value of the vegetation. 16K.

The Gambler
Timex Computer Corporation **Model:** 03-4002 **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Combination blackjack and slot machine game. In blackjack, cards are dealt on a table. The hole card is concealed while the others are clearly displayed. Blackjack shuffles the cards at the beginning of the game, and again when there are only a few cards left. Your winnings, or losses, are displayed on the screen. In the slot machine game, place your bet, watch the letters spin and, if the letters that come up match, a multiple of that bet is added to your score. 16K.

The Game of Nim
Sourceware, Inc. **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 1000
Electronic version of the game played with matchsticks.

Software

The Great Communicator and Opmax
Bomis Prendin Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Try your hand at video ventriloquism. Stage your own press conference with this animated likeness of Ronald Reagan. Opmax creates moving “paintings” on your screen. 16K.

The Great Glider Race
Robert Fingerle **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
Race around a 100 mile course. Decide when and how high to climb in various thermals for the highest course speed. 1K program uses text; 16K uses simulated instrument panel graphics. Includes a discussion of glider flight for the uninitiated.

The Invaders
ABERSOFT **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Features the ability to fire while moving and very fast response to all key pressure. 16K.

The Island
Quicksilva **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068
You are the fortunate recipient of the news that there is treasure buried on an island in the complex of islands that surrounds your own. Your task is threefold: first, you must locate the treasure island, second, you must find the treasure on it, and third, you must bring the treasure to your own island.

The Labyrinth of Qazxl
J.L.K. Software **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000
Combination graphics-text role playing adventure game. Explore the multilevel dungeon while fighting different monsters and collecting different treasures. Draws a map of what you see. The longer you live, the stronger you get. 16K.

Software

The Land Beyond

RW Software **Date:** 1985 **Price:** \$15.00 **Platforms:** TS 1000

Recreate the historic voyage of Ferdinand Magellan through the marvel of interactive history.

The Maltraxians Attack

Turner, Elcy & Com. **Model:** SO1 **Date:** 1982 **Price:** \$9.50 **Platforms:** TS 1000

In the Space Opera series games you are Bart Trueheart, the greatest genius hero of Earth. With your companions, the Kindly Old Professor and his Beautiful Young Daughter, you travel the space-ways in your faithful ship, The Rover of Space. But this idyll cannot last . . . you have enemies. The cunning Little Green Men of By-Orl and the brutish Bug Eye Monsters of Milkorf have joined forces to form THE MALTRAXIAN ALLIANCE.

Earth is depending on you to thwart their evil plans.

You, as Bart Trueheart, must stop the fleet of the Maltraxian Alliance before it can concentrate and attack Earth. Time is limited and so are your resources. You have only your faithful ship, The Rover of Space, and whatever you can capture from the enemy.

The Odds-Maker

Computer WARE-House Co. **Date:** 1984 **Price:** \$24.95 **Platforms:** TS 1000

Dual football program to make your computer a challenging game or valuable prediction aid. More than 75% accurate against spreads. NFL or USFL. 16K.

The Puzzler

Timex Computer Corporation **Model:** 03-4009 **Author:** N. Martino **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000

Inversion takes a minimum of 250 moves to solve. Double Inversion is twice as difficult. 16K.

The Quiz Kit

Timeworks, Inc. **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000

Construct your own quizzes for any subject in which multiple choice or true/false questions can be used. "Video game" atmosphere is achieved through the scoring to give the player the attitude of "me against the computer." Players cannot cheat because only you know the secret password to recall the answers. 16K.

The Snowman

Quicksilva **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

You must collect pieces of snow in order to build the snowman. Points are awarded for each piece of snow that is dropped into place You must avoid gas flames that tend to melt your snow, pick up flashing objects to get extra points, collect ice lollies to help keep your snow from melting and watch out for the Sleep Monsters - who'll put you to sleep at the most inconvenient times - and don't fall off those ledges!

The Thing

Prism Microproducts **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Graphic adventure set in Antarctica. Escape to the helicopter and save your life. 16K.

The Tomb of Dracula

Felix Software **Author:** Moviedrome Video **Date:** 1982 **Price:** \$16.95 **Platforms:** TS 1000

Horror adventure game with 3-D graphics. 16K.

The Trader Trilogy

Quicksilva **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

A trilogy of programs that combine to give and epic graphic adventure. As an intergalactic door to door salesperson, you do the rounds of the Moons of Meridian.

The World of Sangrel (Voyager I)

Horizon Simulations **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

Your spacecraft has landed on a barbaric planet in an attempt to save your own. Here you will meet more than 20 different encounters. This can be used as a role-playing game adventure. 16K.

Thinking Games #1

S & S Company, The **Model:** T1001/T2001 **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000, TS 2068
SCRAMBLED WORDS, CONJECTURE, MEDITATION: 3 two-player games.

Tic-Tac-Toe

Mary Williams **Date:** 1983 **Price:** \$2.00 **Platforms:** TS 1000
Listing. 16K.

Tic-Tac-Toe

Dynacomp, Inc. **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 1000
16K.

Tic-Tac-Toe

Isthmus **Date:** 1984 **Price:** \$5.95 **Platforms:** TS 1000
Game for preschoolers, fun for children as they learn about computers.

Time Rescue

Ruskat **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Pilot a time skimmer and rescue ships stranded in time, but watch out for time vortexes.

Time Trippers (Bandits)

Data-assette **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Travel through time to gain fortunes. Encounter the Minotaur's Labyrinth, Napoleon's Army, the Titanic, the Tower of London. Finally, you must cross the Hall of Death in the Castle of the Prince of Ultimate Evil. 16K.

Software

Timeblasters

Calliope Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Arcade quality graphics space battle. Almost 2K of machine code give unbelievable realism and speed. Six levels of difficulty. 16K.

Timegate

Quicksilva **Date:** 1983 **Price:** \$19.90 **Platforms:** TS 2068
3D moving star backgrounds give a real space feeling to this 5-skill level game. Long range scan shows you where the enemy are and you jump through space to the correct sector. If you're successful at clearing the entire galaxy you can land on the aliens' planet to refuel before jumping the timegate to another infested galaxy. Full damage status readouts.

Toggle

Spike-Soft **Date:** 1985 **Price:** \$14.95 **Platforms:** TS 2068
What would you do if an alien decided to park his spacecraft outside your apartment? Videogame written entirely in BASIC.

Tomahawk

Knighted Computers **Date:** 1985 **Price:** \$16.95 **Platforms:** TS 2068
Real-time flight simulation based on the US ARMY AH64A Advanced Attack helicopter. 3D world display, day/night vision, full instrument display. Allegedly approved by Hughes Aircraft for accuracy prior to release.

Top Secret

Integrated Data Systems **Date:** 1983 **Price:** \$13.40 **Platforms:** TS 1000
Encode and double-encode messages. Over 65,000 possibilities. 16K.

Torpedo Alley

ZETA Software **Price:** \$2.00 **Platforms:** TS 1000
Program listing.

Software

Torpedo Attack

Robotec, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Action-packed war game puts you behind the periscope of your submarine and half of the enemy fleet between you and your home port. You have only 5 torpedoes and cannot outrun the enemy.

Tower

Biocal Software **Date:** 1983 **Platforms:** ZX81, TS 1000

Guessing game. Code demonstrates poking the internal display file. 1K.

Towering Inferno

KOPAK Creations, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Disaster has struck a giant skyscraper and you must rescue the occupants before they fall to their deaths. 16K.

Towers of Brahama

Computer Software Associates **Date:** 1983 **Price:** \$9.95 **Platforms:** ZX81, TS 1000

Challenges your skill and manipulation. There are 3 posts on the screen. Your starting base contains 5 disks stacked in ascending order by size. The remaining 2 are parking bases. To win this game, you must park the 5 disks on the third post in an ascending order. 1K.

Towers of Hanoi

Personal Software Services **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Problem as old as the pyramids. How many moves will it take you? 16K.

Track Down

International Publishing & Software Inc **Date:** 1982 **Platforms:** TS 1000

Adventure in the old West.

Trader

Quicksilva **Date:** 1983 **Price:** \$14.00 **Platforms:** TS 1000

As a galactic trader, you deal with some bizarre customers. Will you live to tell the tale? Trilogy of games. Variables are

passed between programs to provide continuity. Fully animated illustrations. 16K.

Trader Jack

Savage Software **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Adventure, trading game set in the South Pacific. With 40K pick and outfit your vessel then trade among the islands. Your choice of motor or sail against the storms and volcanic eruptions. A short voyage, low profits; a long voyage with greater risks yields greater profits. 16K.

Trafalgar

Microx **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Sea battle game, English versus Spaniards. Published in Computers & Video Games magazine, Apr 83. 16K.

Transylvanian Tower

RAMEX International **Date:** 1982 **Price:** \$24.95 **Platforms:** TS 2068

Trap

Timex Computer Corporation **Model:** 03-4014 **Author:** Thomas Burke **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

A high speed arcade-type game in which you can test your reflexes and see how many bouncing balls you can catch in the trap. The more you catch the harder it is to catch more. Easy to learn but difficult to master. 16K.

Trashman

Knighted Computers **Price:** \$11.95 **Platforms:** TS 2068

Converted from Spectrum.

Travels with Trashman

Knighted Computers **Date:** 1984 **Price:** \$11.95 **Platforms:** TS 2068

Converted from Spectrum.

Trawler

Prism Microproducts **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Business management game set in the North Sea. Can you match the catch of a top trawler captain? 16K.

Traxx

Quicksilva **Author:** Jeff Minter **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

Capture squares for points, if you can capture all four corners of the grid, you'll have only 10 seconds to eat the bugs (the pursuers).

Treasure

Biocal Software **Date:** 1983 **Platforms:** TS 1000

Collect the treasure before the alien robot catches you with its radar tracking system.

Treasure Seeker

Spartan Software **Date:** 1982 **Price:** \$7.95 **Platforms:** TS 1000

Graphics fantasy game; search for a treasure through multi-room dungeon while fighting different types of monsters. Three other games included: Skiier, Mars Lander, Crumblin Caverns. 16K.

Trek Adventure

AARDVARK **Author:** Bob Retelle **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Takes place aboard a familiar starship. The problem is a familiar one: The ship is in a "decaying orbit" and the engines are out. Your options are to start the engine, save the ship, get off the ship, or die. 16K.

Trident

Timex Computer Corporation **Model:** 03-4019 **Author:** George Green **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

A stimulating and intriguing adventure game. You'll marvel at the many hidden dangers, concealed aids, and possible timely escapes. 16K.

Software

Triple Jotsee

Servitronics **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

Yahtzee: game of luck and strategy. 1-6 players. 16K.

Trivia Challenge

Isthmus **Date:** 1983 **Price:** \$18.95 **Platforms:** TS 1000

Based on the board game. Test knowledge in a variety of categories including sports, entertainment, science, history, geography and more. Comes on 4 cassettes.

Tunneling

WaterWares **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Build traps and blockades to outwit the enemy. More than 100 levels of play. 2K.

Tunnels

E & S Software **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

You are the evil Mazor creating mazes that none can escape. One or two players.

Twenty Beginner Programs

W S M Entertainment **Date:** 1982 **Price:** \$5.00 **Platforms:** ZX81, TS 1000

Printed listings. 1K.

Two Handed Euchre

J. C. Software **Date:** 1982 **Price:** \$14.99 **Platforms:** TS 1000

Challenge the computer to this skillful game. 64K.

Tyrant of Athens

M. C. Lothlorien **Date:** 1982 **Price:** \$14.00 **Platforms:** TS 1000

Can you survive long enough to turn Athens into the most feared state in the Mediterranean? Train troops, build warships, fight battles by land and sea against hostile Greek states and the vast Persian Empire. 16K.

Software

Ultimate Forecast, The
Executive Workshop **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000

Forecast your personal or business future with Tarot cards, shuffled and dealt by your computer. Shows the position and significance of each card, name of the card, and if the card is reversed. 16K.

Under the Temple of Khardam

Turner, Elcy & Com. **Model:** MSA2 **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Part 2 of the adventure of the wand of Kormantu.

Urban Upstart

RAMEX International **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 2068

Vault of the Centaurs

ORBYTE Software **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000
Space age battle against Centaur warriors. Fly your starship through space, avoiding meteorites and missiles to reach the vault. Collect the fuel and return home, avoiding the same obstacles. 16K.

Vegas

Intercomputer, Inc. **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Roulette wheel played by one or two players. Select a number from 1-32 and place a bet (maximum \$1000). The payoff is 20 to 1 for a correct number, and 2 to 1 for a number in the same row as the winner. The slot machine takes \$1 bets. The jackpot pays \$25, and two of a kind pays \$2. 16K.

Vegas 21 Blackjack

Florida Creations **Price:** \$1.00 **Platforms:** TS 1000
Vegas 21 Blackjack: Plays Blackjack just like Vegas. Double Down, Split Pars, etc. 16K.

Vegas Cassette
J. Schwitalla **Date:** 1981 **Price:** \$6.95 **Platforms:** ZX80
Black Jack, Slots. 1K.

Velnor’s Lair

Quicksilva **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068
Lose yourself in the Goblin Labyrinth amongst demons, trolls, the undead, and the evil Wizard Velnor. Do you know how to take care of Medusa and other demons? A warriors and wizards, sword and sorcery adventure that will give hours of fun, while picking your your brain for decisions.

Venture

ZX-Guaranteed **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
Adventure game. Makes extensive use of moving graphics and has novel methods of clearing screen (part machine code). 16K.

Video Map

Prism Microproducts **Date:** 1981 **Price:** \$9.95 **Platforms:** TS 1000
Navigate your plane cross-country. 16K.

Voice Chess

Softsync, Inc. **Author:** Chris A. Thornton **Date:** 1984 **Price:** \$24.95 **Platforms:** TS 2068
Digitized voice speaks through the computer’s speaker, advising of its move, recommending moves for you and making facetious comments. Features include: analyze mode, recommend move, change colors or levels at any point in the game, save, reload and print out any game you play. Displays full chess board in detail. Adapted from the program by Artic Computing for the ZX Spectrum.

Volcanic Dungeon/Hangman
Data-assette **Date:** 1982 **Price:** \$10.25 **Platforms:** TS 1000

Attempt to rescue the elfin princess in Volcanic Dungeon. Hangman is deluxe version of the classic game with 400 word vocabulary. 16K.

Voyage Z

Software House, The **Date:** 1983 **Price:** \$6.50 **Platforms:** TS 1000
Guide your craft across the galaxy to save the Bimbos. 16K.

Wall Busters

Melbourne House **Date:** 1982 **Price:** \$14.95 **Platforms:** ZX81, TS 1000
A game of skill with exciting moving graphics that fits into 1K. Try your skill on the easiest level because even with the most skillful bat control you will find the hardest level a real challenge. Breaking through the first barricade is easy, but do not be fooled. Two ball angles and a curved bat increase the challenge. 1K.

Wall Street

Timeworks, Inc. **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000
You are a savvy Wall Street investor speculating in stocks, real estate, precious metals, minerals, and the money markets. You have limited dollars to invest which will put you on Easy Street or into the Poor House A financial advisor is available to assist you but he is not always right, and he is expensive. No special investment knowledge required. Realistic simulation for 1-4 players. 16K.

Wall Street

Servitronics **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Strategy game for 1-3 players based on the ups and downs of the stock market. 16K.

Software

War
Biocal Software **Date:** 1983 **Platforms:** TS 1000
Inverse video graphics display program which plots a multiplayer card game.

War in the East

Sharp’s **Author:** Mark Stueber **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000, TS 2068, QL
You command the German invasion of Russia to take Moscow. As commander of the German forces you must launch a surprise invasion of Russia, capture and hold Moscow before the weather and the Red Army overwhelms you. Effects of terrain, weather and fuel supply. Eleven types of divisions and brigades.

Available for the TS 1000 in 16K, 32K, TS 2068 and QL.

Warlord

M. C. Lothlorien **Date:** 1982 **Price:** \$14.00 **Platforms:** TS 1000
Challenging game of analytical skill. You are a warlord in 13th century Japan. You must defeat attacks by other warlords and pirates, capture slaves and clothe your troops. Companion game to Samurai Warrior. 16K.

Warp IO

Soft Clair **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Graphics space game with 10 skill levels. 16K.

Waterloo Campaign

Timewars **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 1000
Simulation of the most famous campaign of the Napoleonic wars. As general of Napoleon’s outnumbered army, you must attack quickly and break through Wellington’s defenses before his reinforcements can arrive. The game is played with corps-sized units on a map of the actual battleground. You and the computer take turns moving and attacking with your units. The outcome of each battle depends on a prob-

Software

ability function of the number of units and the terrain.

Wharri

Smartware **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Based on an ancient African game that was played with beans and bowls. 16K.

Wild West Adventure

Signature Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Travel through the harsh terrain of the Wild West. Use your head and become rich. Be the hero in this quest for treasure. 16K.

Winged Avenger

Savage Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Fast action arcade game. Dumb and smart missiles are launched against your base. Both scout and main fleet attacks. Your safety depends on your laser gunnery skills. You must wipe out these forces before you exhaust your energy and are forced to surrender. 16K.

Wizard

AI White **Price:** \$5.00 **Platforms:** TS 1000
Graphic Dungeons and Dragons game.

Wizard’s Castle

David Spellman **Date:** 1984 **Price:** \$12.95 **Platforms:** TS 1000
Fight monsters, hunt treasures, solve problems, defeat the evil wizard. 3D graphics. Randomly generated dungeon with more than two dozen types of monsters, treasures, traps and special items.

Wolfpack

Biocal Software **Date:** 1983 **Platforms:** TS 1000
You are the commander of a Navy destroyer searching for enemy submarines. Depth charges ready.

Word Cross

Timex Computer Corporation **Model:** 06-3019 **Author:** Fisher-Marriott **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068
If you enjoy the challenge of crossword puzzles, you’ll enjoy word-cross. To become an expert, you must insert words into a grid, crossing the words with each other and making no more than five mistakes. Converted from a ZX Spectrum title by Soft-Sync.

Word Play

Run-It Software Club **Date:** 1982 **Price:** \$7.95 **Platforms:** TS 1000
Two games: Scramble and Cipher. 2K.

Word Play I

Timex Computer Corporation **Model:** 06-3020 **Author:** Fisher-Marriott **Date:** 1983 **Price:** \$15.94 **Platforms:** TS 2068
Hangman asks you to guess the word before the computer “hangs” the man. Anagrams challenges you to decipher a word the computer has scrambled. Use our words or create your own lists. Converted from a ZX Spectrum title by SoftSync.

Word Play II

Timex Computer Corporation **Model:** 06-3021 **Author:** Fisher-Marriott **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068
Hangman asks you to guess the word before the computer “hangs” the man. Anagrams challenges you to decipher a word the computer has scrambled. TS Rabble is line scramble — find out how many words you can make and how high you can score. Converted from a ZX Spectrum title by Soft-Sync.

Word Puzzle/Yahtzee

Jamm Software **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000
Guess phrase, title or name by guessing one letter at a time. Play against the computer or opponents. 16K.

Word Quest

Timex Computer Corporation **Model:** 03-3022 **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Words are scrambled. Objective of the game is to guess (unscramble) the 5 words in the least amount of time. 99-word vocabulary. 16K.

Word Scramble

Dynacomp, Inc. **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 1000
16K.

Word-Hunt

Game Room, The **Date:** 1983 **Price:** \$4.00 **Platforms:** ZX81, TS 1000
Find words in jumbled letters. 1K.

Wordpack ZX81 1 & 2

Wida Software **Date:** 1983 **Price:** \$9.00 **Platforms:** TS 1000
Authoring system for word games. 1) Multiple choice test; odd man out. 2) Word test; Matchik. 16K.

Wordpack ZX81 3

Wida Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Authoring system for word games. 1) Jackpot: word game based on one-armed bandit, useful for 3-way matching. 2) Language snap: player’s attempt to stop a changing display when two matching items appear. 16K.

Wordpack ZX81 4

Wida Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Authoring system for word games. 1) Crossword: enter (and play) any square crossword and clues. 2) Anagrams: randomly generated anagrams (up to 40 items) with verbal hints. 16K.

Wordplay

Apropos Technology **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
A group of five word manipulating programs: Jargon, Story, Animal, Haiku and Secret.

Software

Wordpuzzler

Robert Fingerle **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
Hides words in a random character matrix. Search for them on screen or on print-out. Put in your own words or use those stored with the program.

Wordsearch

Rheesware **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 2068
Puzzle generator.

Wordsearch

Paul Shreeve Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Generates word search puzzles from user input. Prints out a copy of the puzzle if a printer is connected. 16K.

Working Mother’s Dilemma

2-Bit Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Package of 4 games. Designed as a fun way for women to learn about computers. Mad Dash: Tests your ability to race through the house when you have not had a break all day. Carfool: Figure out how to use the least amount of gas while running errands all over town. Harried Housewife: Adventure game that rewards you with a hot bath and a nap after a hectic day that includes a dazed search for your car in the parking lot of shopping mall.

Worm

Biocal Software **Date:** 1983 **Platforms:** TS 1000
Plots a worm’s path as it searches for entry into the ground.

Worm Wars

Reindeer Enterprises **Date:** 1983 **Price:** \$7.85 **Platforms:** ZX81, TS 1000
Arcade game. 1K.

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TS1000
ZX81
16K

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Wrath of Kong

Greg Brooks Software, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Beautiful Jane has been abducted by savage Kong. Her rescue requires a perilous venture into Kong's lair, during which you will face tumbling barrels, trap doors and collapsing girders. 16K.

Wumpus Adventure/Movie Mogul

Data-assette **Date:** 1982 **Price:** \$10.25 **Platforms:** TS 1000

Seek the famous creature in the most dangerous Wumpus hunt ever. In Movie Mogul, make your way through traumas of production. Use your budget wisely to make a fortune. 16K.

X-81 Space Raiders

Nirad Electronics **Price:** \$19.95 **Platforms:** TS 1000

Enhanced version of Star Trek with graphics to simulate warp speed star field, resource management requirements and more.

Xadom

Quicksilver **Price:** \$9.95 **Platforms:** TS 2068

3D hi-res arcade quality adventure where you have to find an artifact stashed in one of 20 rooms. Every room offers a new challenge that must be overcome before it is possible to move on to the next room.

Yahtzee

Crystal Microsoft Ltd **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Computer version of the dice game. 1-4 players. 2K.

Yahtzee

JPR Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Roll 5 dice; improve roll by rolling any or all of the dice. Object: to score each improved hand on 13 line score sheet. Game is over when all the lines are used. 1 to 4 players. 16K.

You're The Boss

Cottage Technology **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

As president of your own company, you make the production and marketing decisions that lead to success or bankruptcy. Strategy game for 1 or 2 players. 16K.

Z-Trek 1000

Michael B. Williams **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Battle as many as 200 highly mobile Zylons with your powerful starship, the Sinclair. Full screen display (24 lines) with scrolling. 8 commands including 360 degree navigation, probe, and torpedoes. Display shows quadrant, status, and galactic map. 16K

Z.S.S. Sinclair, Cold Shutdown

THM Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

You are the sole surviving member of the crew of the Zoological Survey Ship Sinclair. You awaken from stasis only to find the alien specimens roaming the ship and a

cold shutdown of the ships reactor only hours away! You must fight off the creatures and repair the ship before time runs out. 33 pods, unlimited aliens, tools, etc. 16K.

Zapamoley

Games to Learn By, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 2068

Zap the sleepy mole as often as you can. Lose points for hitting Rocky Rocks.

Zaraks

Prism Microproducts **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Get around the maze without the guard catching you. Nine levels of play. 16K.

Zetapak 1: War Games

ZETA Software **Price:** \$9.95 **Platforms:** ZX81

Bomb Run, Sub Hunter, Barrage, Fighter Pilot, Torpedo Alley and Dragon's Teeth (tank battle). 1k games.

Zetapak 3: SciFi Fantasy

ZETA Software **Date:** 1982 **Price:** \$9.95 **Platforms:** ZX81

Planetfall, Turret Laser, Arcade Invaders, Hyperspace Display, and Star Catcher. All 1K games.

ZetaTrek

ZETA Software **Price:** \$19.95 **Platforms:** TS 1000

Pilot a scout/fighter craft out of Space Station Heinlein, patrolling the North Polar region of the solar system against warrior Lizard-men, origin unknown. Features launching, docking and target practice but when you encounter enemy craft, there is one level of difficulty: kill or be killed.

ZK Basketball Relays

ZOR KHAN Industries **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000

Teams include 8 individually rated players who shoot, rebound and defend as in real life. Solitaire or two players, 1981/82 Pro (23 teams) or College Top 25. 16K.

ZK Football

ZOR KHAN Industries **Model:** G.4 **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000

Text version of football. Features 12 offense players, 8 defenses, solitaire or dual plays, auto time keeping, individually designed teams, and full team stats. Plastic keyboard overlay. 16K.

ZK-Party Games

ZOR KHAN Industries **Model:** G.2 **Author:** P. Massengill **Price:** \$9.95 **Platforms:** TS 1000

Five fames for hours of party fun. Includes Charades (500 topics), Password (500 words), Improv-Skits, Gossip and "Radio DJ". 16K

Zombies, Sink the Sub, Nim

Artic Computing **Model:** G3.03 **Price:** \$11.50 **Platforms:** ZX80

Games for the ZX80 with 3K RAM.

Zombies/Sword of Peace

Artic Computing **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

In Sword Of Peace, free yourself from a dungeon to prove yourself worthy of becoming the Monarch of Oz. Zombies: Stranded on an island, your only hope to avoid the Zombies is to lure them into pot-holes. 16K.

Zor

International Publishing & Software Inc **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

In the style of a medieval joust, 2 mighty robots join battle on a remote barren planet. Your energy shield is being eaten away by Zor's onslaught. Can you think and fire fast enough to save your planet from enslavement? Renamed version of Sub-space Striker. 16K.

Software

Zorx Wars

Arizoftx **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Battle Zorxian fighters, space cruisers, killer satellites and neutron bombs amid black holes. 16K.

ZT

Bronze Star Software **Date:** 1983 **Price:** \$7.00 **Platforms:** TS 1000

A hidden maze game. You are placed at the edge of a thick forest (a randomly generated maze). Seeing only in front, behind, and to both sides, you must avoid the FBI agents who are after you and get ZT home. First in a series of strategy games that challenge the player’s mind, not his index finger. 16K.

Zuckman

Software Supermarket **Date:** 1982 **Price:** \$18.00 **Platforms:** TS 1000

Pac Man clone. 16K.

ZX 1K Gamespack

Mikro-Gen **Date:** 1983 **Price:** \$14.95 **Platforms:** ZX81, TS 1000

Includes Impact, Target and Deathray. 1K.

ZX Battleship

CRC Software **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

Implementation of the boardgame, for two players. 16K.

ZX Chess I

Artic Computing **Date:** 1981 **Price:** \$14.95 **Platforms:** TS 1000

A challenging chess program, written in machine language, designed to operate in the ZX81 fast mode. ZX Chess allows you to select from 6 levels of play, choose either black or white, and enables castling and en-passant moves. Unique self-running feature: you start the tape and when the chess board appears on the screen, start your game. 16K.

ZX Chess II

Artic Computing **Date:** 1982 **Price:** \$24.95 **Platforms:** TS 1000

All the features of ZX Chess I, plus more. Has a book of 32 opening moves. Can play at 7 levels, four of which play within competition time limits. A move is suggested by the computer if requested. 16K.

ZX Compendium

Oasis Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Four games: chess, 3D tic-tac-toe, Nim, code breaker. 16K.

ZX Froggie

Powell Hargrave **Date:** 1983 **Price:** \$14.50 **Platforms:** TS 1000

Froggie must cross the busy highway and hop from log to log to get home. Featuring: full screen moving graphics; fast machine code action; four levels with different screens and increasing speed. Name best scores and SAVE for the next time. 16K.

ZX Galaxians

Artic Computing **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 1000

ZX Galaxia is a good adaption to the ZX81 of the popular arcade game. You are being attacked in deep space by formations of hostile Galaxians, and it is your mission to prevent them from attacking Earth by zapping them with your laser gun as they break out of formation and hurtle towards you. 16K.

ZX Open

Computronics **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000

Simulates golf on 5,240 yard, par 71, 18 hole course. Select driver, irons, pitching wedge, or putter. Holes, slices, or misses the ball. Sand, water, or lost in the trees. Up to 4 players. Automatic score card. 16K.

ZX Othello

Mine of Information **Date:** 1983 **Price:** \$19.00 **Platforms:** TS 1000

Nine skill levels, action replay, set up initial position, sample game, etc. 16K.

ZX Reflex

Micro Da et Fils **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

10 round game with maximum score of 5000 points. High score is said by program (1 counter per difficulty level, 10 levels of difficulty). French and English versions.

ZX Scramble

Mikro-Gen **Platforms:** TS 1000

Pilot your spacecraft through a fast moving, complex space maze. Watch out for missiles being fired from all directions. You can shoot back or evade them.

ZX Star-Trip

Event Horizon Software **Date:** 1983 **Price:** \$7.50 **Platforms:** TS 1000

Nail the aliens in outer space. Warp, photons, star bases, smart K-ons.

ZX Yahtzee

Smartware **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

The classic dice game of strategy and luck, played on a computer. One to four players. 16K.

ZX-Black Box

Haymarket Software Co. **Date:** 1982 **Price:** \$10.95 **Platforms:** TS 1000

16K.

ZX-Concentration

Haymarket Software Co. **Date:** 1982 **Price:** \$8.95 **Platforms:** TS 1000

Find more of the 18 pairs of letters hidden on an 8x8 board by observing the reactions of laser beams fired into the box. Both the board and all the rays are displayed at all times. 16K.

Software



ZX-Man

Atto-Soft **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Pac Man clone. Works with Atto-Soft’s joystick. 16K.

ZX-Trek 1.0

Systems and Solutions, Ltd. **Price:** \$4.95 **Platforms:** ZX80

ZX/TS Black Box

Aldebaran Alpha **Date:** 1984 **Price:** \$10.95 **Platforms:** TS 1000

Four or more points are hidden on a grid. Locate them by sending imaginary beams at them and analyzing the results. One to four players.

ZX80 Chess

P. Joy **Price:** \$19.00 **Platforms:** ZX80, MicroAce

Developed specifically for the ZX80. 3 levels of play against the computer. Graphics board displayed, fairly rapid response time.

ZX80 Cosmic Dog Fight

MATTEX **Price:** \$1.50 **Platforms:** ZX80, TS 1000

Fast action space game. 4K and 8K ROM versions. 1K.

ZX81 1K Super Trio

Macronics **Date:** 1983 **Price:** \$8.00 **Platforms:** ZX81, TS 1000

3 1K RAM games: Breakout, Music Maker, and Space Invaders.

ZX81 Adventure

Simpson Software **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000

Adventure game set in Camelot Castle. 25 locations with lots of treasure but watch out for the dwarves and pirates. 16K.

ZX81 Bomber

Rimas Buntinas **Date:** 1982 **Price:** \$3.00 **Platforms:** ZX81, TS 1000

Drop bombs and two types of missiles on the enemy; graphics; points and percentage. 1K.

ZX81 Bumper Pack-1

Macronics **Date:** 1983 **Price:** \$20.00 **Platforms:** TS 1000

7 machine code/BASIC games on 3 cassettes. Space Invaders, Zac-man, Nightmare Park, Space Rescue, Dragon Maze, City Patrol and Sabotage. 16K.

ZX81 Checkers

B&B Software **Price:** \$11.95 **Platforms:** TS 1000

Full screen moving graphics. 16K.

ZX81 Football

R. D. Brennan **Date:** 1984 **Price:** \$10.95 **Platforms:** TS 1000

Try your luck against the computer or another player. All the features of professional football. 42 different plays.

ZX81 Galaxy Wars

J Edmonds **Price:** \$8.00 **Platforms:** ZX81

ZX81 Invaders

J Edmonds **Price:** \$8.00 **Platforms:** ZX81

ZX81 Mini Invaders

J Edmonds **Price:** \$8.00 **Platforms:** ZX81

ZX81 Tic-Tac-Toe

A.F.R. Software **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000

Written to be both entertaining and educational, there are about 457 variations of this game.

ZXAK MAN

Pleasantrees Programming **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Full screen clone of Pac Man. 16K.

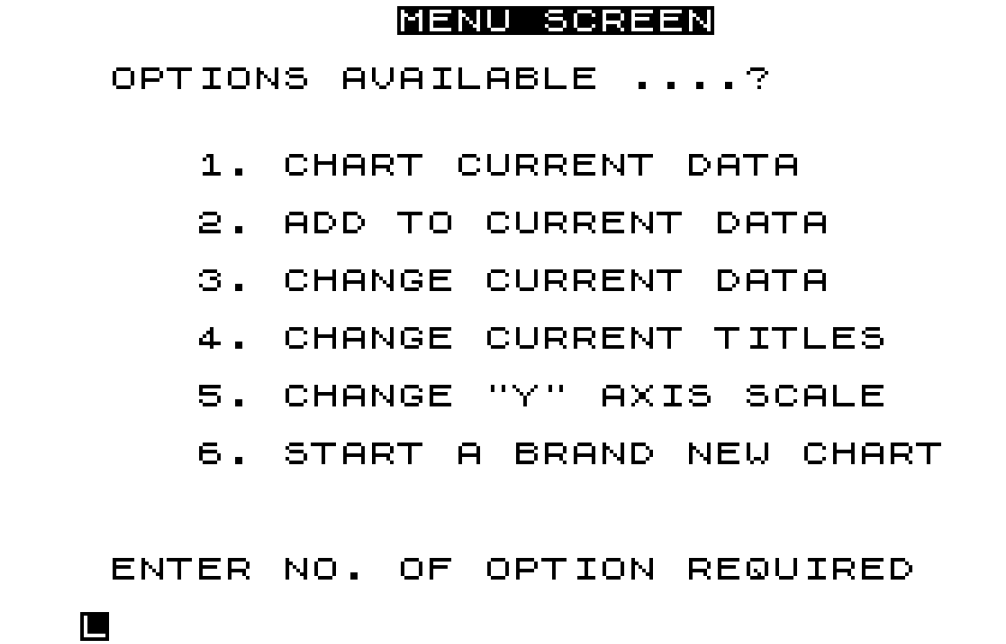
ZXBOMBER

Blake Kincaid **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000

11 ranks, 40 cities of varying sizes, and a mixture of graphics (for the attack) and text (upon return to base). 16K.

ZXtricator

G. Russell Electronics **Price:** \$9.00 **Platforms:** ZX81, TS 1000, TS 1500



Graphics

Similar to the Art category, programs in this group produce graphic images. Uses ranged from calendar/poster printing software to business charts.

1989 Personal Calendar Plus!

Lemke Software Development **Date:** 1989 **Price:** \$19.95 **Platforms:** TS 2068
14 month calendar. Loads into Pixel Print DTP; personalize in Pixel Print. Print 1 or 4 months per page. Comes with 80 calendar icons.

1st Class Fonts II

Byte Power **Date:** 1988 **Price:** \$19.95 **Platforms:** TS 2068
28 fonts, 64 column print.

2068 Banners

Zeem Graphics **Date:** 1985 **Price:** \$14.95 **Platforms:** TS 2068
Print banners with 2040 printer. Complete alphabet, numbers and punctuation.

3-D Graphics

Russell Brewer **Date:** 1983 **Price:** \$8.75 **Platforms:** TS 1000
Create three-dimensional objects and view them in two dimensions. Can be viewed from and relative position, angle or distance. 16K.

A Fast Well-Behaved Pattern Flood Fill

Alvin Albrecht **Date:** 2003 **Platforms:** TS 2068
Source code to accompany the article.

ACZ Easy Graph

Cottage Technology **Author:** Alan R. Czarnek **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Converts data into a fast, flicker free bar graph display labeled with appropriate scale and title. When SAVED, program retains past data for easy updates.

Advanced Video Modes

Beaver Computer Products **Date:** 1985 **Price:** \$15.00 **Platforms:** TS 2068
Utility for 2068's dual screen, extended color and 64 column modes.

Banner Designer

Zebra Systems, Inc. **Model:** C280 **Date:** 1986 **Price:** \$19.95 **Platforms:** TS 2068
Create banners that include graphics and text.

Bannerific

John McMichael **Date:** 1988 **Price:** \$8.95 **Platforms:** TS 2068
Utility program, probably to print banners on the CBM 1520 via the 2068/1520 interface.

Banners

Jim Clatfelter **Date:** 1986 **Price:** \$10.00 **Platforms:** TS 2068
Print 6 inch letters with AERCO printer interface and 80 column printer.

Barchart Program

Al Jorgensen **Date:** 1983 **Price:** \$5.00 **Platforms:** ZX81, TS 1000
Indexes 28 vertical bars 20 spaces high. 1K.

Bingham's Best

Paul Bingham **Date:** 1987 **Price:** \$12.95 **Platforms:** TS 2068
Includes:

- crater - 3-D mathematical plot of the moon's surface (Time Designs July/Aug '85)
- altaz - Converts astronomic coordinates to altitude/azimuth (Time Designs Nov/Dec '85)
- udg - Ultra-easy designer graphics for re-design of user-defined graphics (Time Designs July/Aug '86)
- son - udg version 2 allows multiple fonts and more (Time Designs Nov/Dec '86)
- windows - BASIC full-screen window facility + restores screen (SyncWare News Nov/Dec '86)
- cfe/b - BASIC Classy Front End new fonts utility (Time Designs Mar/Apr '87)
- cfe/mc - Complete Classy Front End fonts, machine code version (Time Designs July/Aug - Nov/Dec '87)

Software

- w&p - Windows and Portholes complete - can work with cfe/mc (Time Designs Jul/Aug '88)

CADZ
Zunk Custom Electronics **Author:** Larry Zunk **Date:** 1988 **Price:** \$20.00 **Platforms:** TS 2068

Design, on a 4 screen page, printed circuit boards, schematics, advertisements or any large graphics project. Requires Novelsoft's ARTWORX.

Used to design an electronic fuel injection system, a monitor for a Mazda rotary engine in an experimental aircraft and a computer-controlled driver-less steering system.

Features include move, swap, overlay, cut & paste, mirror horizontal/vertical, invert, DIP/SIP/finger/doughnut auto draw, trace routing, scaling, 64 column screen printing, scientific calculator, create layers, simple animation, up to 172k of screen data in memory with 256k.

Supports AERCO or LarKen disk or tape, any 32k to 256k RAM expansion, Olivetti ink-jet and Epson compatible printers, any printer interface.

Over 300K of program data and sample files.

Cassette Index Card Maker
Bottle Cap Software **Author:** Mike Fellerski **Date:** 1991 **Price:** \$5.00 **Platforms:** TS 2068

Make professional cassette index cards for cassette storage boxes on almost any paper stock. Requires OS-64.

CDESIGN
Variety Sales **Date:** 1985 **Price:** \$9.99 **Platforms:** TS 2068

Design user defined graphics with joystick or keyboard. Move a cursor around a big 8x8 grid and easily design a character. The computer gives decimal code.

Character Font Generator
Beaver Computer Products **Date:** 1985 **Price:** \$15.00 **Platforms:** TS 2068

Aids in designing custom character sets (UDGs). Once created, characters can be rotated, reflected, inverse printed or saved to tape.

Character Generator Demos
EZRA GROUP II **Date:** 1982 **Price:** \$2.95 **Platforms:** ZX81, TS 1000 1K.

Character Sets for 2068
Cactus Software **Date:** 1985 **Price:** \$10.00 **Platforms:** TS 2068

Three different character sets: Space Age, Hi-Tech and Gothic. All machine code based and relocatable.

Chartmak
Golden Stair, The **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Six modes of operation for line, bar and pie charts. RPNZL application. 16K.

CHR\$
Foote Software **Price:** \$12.95 **Platforms:** TS 2068

Chroma-Soft
G. Russell Electronics **Date:** 1985 **Price:** \$14.95 **Platforms:** ZX81, TS 1000, TS 1500

Colors on your black and white TV via optical illusion.

CMS/1520 patch kit
John McMichael **Date:** 1988 **Price:** \$8.95 **Platforms:** TS 2068

Collection #1
John McMichael **Date:** 1991 **Price:** \$12.95 **Platforms:** TS 2068

Over 150 large and small graphics for Print Factory. Includes men/boys, women/girls and miscellaneous digitized images.

Collection #2
John McMichael **Date:** 1991 **Price:** \$12.95 **Platforms:** TS 2068

More than 160 large and small graphics for Print Factory. Collection includes animals, sports, transportation, computers, food, holidays, Xmas and funny images.

Collection #3
John McMichael **Date:** 1991 **Price:** \$12.95 **Platforms:** TS 2068

Large and small graphics for Print Factory. Collection includes female faces, male faces, animals, zodiac signs, holidays and transportation.

Color Hi-Res Helper
T-S Systems **Date:** 1983 **Price:** \$4.00 **Platforms:** TS 2000, TS 2068

A utility program in machine language to help you work properly with graphics.

ColorCopy
John McMichael **Date:** 1988 **Price:** \$8.95 **Platforms:** TS 2068

Copy a SCREEN\$ in color? Yes! All eight Timex paper and ink colors are accurately reproduced on an Okimate 20 in a full 24 line x 32 column graphics screen dump. Copies in two sizes in color or black and white. Patch kit allows MSCRIPT 5/5.2 to print to Okimate 20. Hi-mem driver for LPRINT/LLIST to Okimate 20.

Requires 2068/1520 Printer Interface.

Colossus
Lemke Software Development **Author:** Stan Lemke **Date:** 1986 **Price:** \$19.95 **Platforms:** TS 2068

Banner designer program similar to The Print Shop. Prints horizontally on TS 2040 printer or on a full-size printer supported by Zebra Systems' ZPrint-80 printer driver.

Compu-Pen
Bob Woish **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000

An "Etch-a-Picture" type program in which you have a choice of characters (Compu-Pen I) or high resolution drawing

Software

(Compu-Pen II). Beautiful displays, designs, messages, etc. 2K.

Dataplot
Peak **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000

Dataplot plots stock prices, scientific data, etc. Plots positive and negative free formatted data stored in REM statements. Can be used with your printer. Draws and labels axes, titles your plot, draws figures, plots from an equation and will plot on a grid.

Desktop Publisher
Charles Stelling **Date:** 1987 **Platforms:** TS 2068

Draw and Recall
Friendly Computer **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Draw on your TV screen and store your drawing to be recalled later. Similar to "Turtle" graphics. You enter an angle and a distance, the program draws the line. Other functions are: move without drawing, erase, delete, display screen position. 16K.

Draw-It
Horizon Simulations **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

Create 12 screens of pictures and save them on cassette or print them. Modify the pictures later.

Etch-a-Screen
Simulusion **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Two drawing programs. Etch-a-Screen: Draws text and graphics in any direction; instantly and easily generates pictures; SAVes on tape or COPYs to printer; with 16K RAM, it can store 19 video slides and then display them in rotation with selected pauses. Crazy Painter: Draws random patterns on the screen with wild brush strokes and manic speed. 2K.

Software

Etch-A-Sketch II

Frog Software **Date:** 1983 **Price:** \$0.30
Platforms: ZX81, TS 1000
Digital version of the original. Listing.
1K.

Extended Graphics Package

Minnys Electronic Inc **Date:** 1984 **Price:**
\$29.95 **Platforms:** TS 1000
For the ZX-GR expansion unit.

Font Library #2

Lemke Software Development **Price:**
\$14.95 **Platforms:** TS 2068
Fonts for Pixel Print Plus.

Font Library #3

Lemke Software Development **Date:**
1988 **Price:** \$19.95 **Platforms:** TS
2068
Fonts for Pixel Print Plus.

Font Manager

Jack Dohany **Price:** \$20.00 **Platforms:**
TS 2068
Collection of fonts, user defined graphics
and font editor/manager.

Font Package #1

Lemke Software Development **Price:**
\$19.95 **Platforms:** TS 2068
Fonts for Pixel Print Plus.

General Purpose Plotting Routine

Ronald Rissel **Platforms:** TS 1000, TS
2068
With automatic scaling and labeling.

Grafix

Personal Software Services **Date:** 1983
Price: \$14.95 **Platforms:** TS 1000
Draw complex images and save them
on tape or put them in your own program.

Graph Power

BASCO **Date:** 1983 **Price:** \$10.00 **Platforms:**
TS 1000
Menu driven program allows bar graph
and pie charts to be produced. 5 bar scales

can be selected with up to 18 points plotted.
16K.

Graph-It

Run-It Software Club **Date:** 1982 **Price:**
\$14.95 **Platforms:** TS 1000
Plots user supplied equations on polar
or rectangular coordinates chosen from
menu. Calculates scales; accepts equation
as variable rather than program statement
(no re-programming necessary). Help section
sends results to printer. 3-dimensional
graphs also possible. Improves math understanding
as well as displays data in graphical form.
16K.

Graphics Designer

Frank Lockhart **Date:** 1985 **Price:**
\$9.95 **Platforms:** TS 2068
Design your own custom graphics for
use in games, business, technical programs.
Tutorial. Takes the mystery out of creating
your own user defined graphics.

Graphics Drawer

Dynacomp, Inc. **Date:** 1983 **Price:**
\$14.95 **Platforms:** TS 1000
16K.

Graphics I

ORBYTE Software **Date:** 1982 **Price:**
\$14.95 **Platforms:** TS 1000
Draw, change, and redraw. Begin and
end lines at any point. Draw a design and
then move the entire pattern to another
screen location. Designs can be memorized
by the computer and recreated again. Coordinates
of the pattern will be printed out at the end
so that you can again create the same design.
Also listed as Magic Graphics. 16K.

Graphics Pac 1

Apropos Technology **Date:** 1982 **Price:**
\$10.95 **Platforms:** TS 1000
Five programs for drawing pictures. Two
produce “pop” art, two produce line drawings
and the last is a “complete screen formatter.”
16K.

Graphics Software

Finesoft **Date:** 1983 **Price:** \$7.00 **Platforms:**
TS 1000
Draw circles, squares, rectangles, ellipses,
arcs, lines. Symmetry selectable. Routines
can be used in own programs. 16K.

Graphics Starter Pack

Computer Software Associates **Date:** 1983
Price: \$7.95 **Platforms:** ZX81, TS 1000
Four 1K graphic programs: Kaleidoscope,
Large Print, Medium Print, Draw a Picture.
Explains and discusses GOSUB, INKEY, PRINT
AT, PLOT and UNPLOT, the way the ZX81 stores
character shapes (and where), the decomposition
of the decimal to binary and how to use the
cursor to “draw” on the screen. 1K.

Graphit-1

Date: 1988 **Price:** \$5.00 **Platforms:** TS
2068
Menu-driven graphing program. Features
three times as many input values as Quadra-
Chart, three dimensional bar graphing, plot
data points with connect points option. Copies
to TS 2040, full-size printer with appropriate
interface. Save SCREEN\$ and/or DATA().

GRAPHIX

Nick Godwin **Date:** 1982 **Price:** \$5.99
Platforms: TS 1000
Image processor. No more tedious number
punching to “draw” on the screen. Features:
transferable images, image mixer, image
reverser, up to 12 “files”. 16K.

Graphix Pak

ROMPAK **Date:** 1983 **Price:** \$16.95
Platforms: TS 1000
Utility routines.

Graphs and Charts

Spharler Software Systems **Platforms:**
TS 1000

Software

Greeting Card Designer

Zebra Systems, Inc. **Model:** C272
Date: 1985 **Price:** \$19.95 **Platforms:**
TS 2068
Design and print custom greeting cards.
Includes graphics.

Print custom greeting cards for any occasion
including: birthdays, anniversaries, Mother’s
Day, Valentine’s Day, Christmas, and others.
It can also be used to make custom invitations,
thank you cards, get-well cards and announcements.

Easy to use and includes a library of 16
pre-drawn hi-res graphic pictures for most
holidays such as a Christmas tree, birthday
cake, turkey, wreath, graduate, gift box and
others. You can also design your own library
of images to create just about any theme
greeting card. Included are 8 decorative
borders which you can use to decorate your
cards.

You can write custom messages on the cover
and inside your cards in a selection of character
fonts and sizes.

Hey, There!

Simulusion **Date:** 1983 **Price:** \$9.95
Platforms: TS 1000
Two display programs. Banner: Continuously
scrolls a banner of up to 700 giant letters
smoothly across the screen; clear, SAVE on
tape, or add a message with a single
keystroke. Message Board: Displays the first
line of up to twenty messages; press a call-
letter to view any message. 2K.

Hi Res Printer Graphics

G. Russell Electronics **Date:** 1983
Price: \$10.00 **Platforms:** TS 1000
Collection of MC utilities; 256 x 192 resolution
on TS 2040 or ZX Printer. Includes plotting
points, point to point line drawing, mixing
hi-res and keyboard characters, full screen
drawing. Reverse side: LEASTHR; weighted
least squares linear regression analysis
routine; outputs hi res straight line graphs
calculated from x, y coordinates of data.

Software

Hi-Res Graphics in Action

T-S Systems **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 2000, TS 2068

Takes advantage of the impressive hi-res graphics capabilities of the TS 2000.

High Resolution Graphics

Inter-Pacific Systems Inc. **Date:** 1984 **Price:** \$8.00 **Platforms:** TS 1000

Increases graphics resolution to 192x128. Faster PLOT, test and unplot points.

High Resolution Printer Program

Computer Continuum **Date:** 1983 **Price:** \$35.00 **Platforms:** TS 1000

Graphics, data acquisition, averaging and scaling routines with optional graticule. Can be used with analog interface board.

High-Res Package

International Publishing & Software Inc **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Routines for graphics up to 256x192 pixels, sine wave generator and 3D exponential graph generator. 16K.

HIGH * RES Mandlebrot-FFP

Silicon Mountain Computers **Author:** Fred Nachbaur **Date:** 1986 **Price:** \$9.95 **Platforms:** TS 1000

Program to implement the Mandelbrot Set using SRAM HI-RES Extended BASIC. 16K.

Histogram

Z-Ware **Date:** 1982 **Price:** \$8.95 **Platforms:** TS 1000

Plots bar chart. 16K.

HR * Copy

Silicon Mountain Computers **Date:** 1988 **Price:** \$9.95 **Platforms:** TS 1000

Print high-resolution graphics to 9-pin dot matrix printers like the Epson, C. Itoh and others.

IBAL

Bomis Prendin Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Wire-frame modeling program. Store any object in memory and view it from any point. Expands image to maximum possible size. 16K.

Icon Package #1

Lemke Software Development **Price:** \$19.95 **Platforms:** TS 2068

Icons for Pixel Print Plus.

Icon Package #2

Lemke Software Development **Price:** \$19.95 **Platforms:** TS 2068

Icons for Pixel Print Plus.

Inverse Graphics Subroutines

M. T. Ehasz **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

8 machine code subroutine listings with loading tips and full instructions. 2K.

Inverse Video

Peak **Date:** 1983 **Price:** \$4.00 **Platforms:** ZX81, TS 1000

Machine language routine to reverse screen to white characters on black background. Listing. 1K.

Jazzofire

Paul Bingham **Date:** 1988 **Price:** \$9.95 **Platforms:** TS 2068

Includes:

- “udg+” - The popular and useful “son” of udg program as found on Bingham’s Best.
- “cfe/mc” - Complete machine code version of Classy Front End (use alone or with “w&p”)
- “w&p” - The complete machine code version of Windows & Portholes.

JB’s Banner Program

Zebra Systems, Inc. **Model:** C418 **Date:** 1986 **Price:** \$14.95 **Platforms:** TS 2068

Uses high resolution character set (32x32 cells) to give high quality output on

Software

Movies

Nick Godwin **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

Create and use special moving graphics effect with minimum effort. Comprehensive drawing board enables creation of images frame by frame. Efficient storage system allows hundreds of frames to be stored in 2000 bytes.

Multi-Color Images

T-S Systems **Date:** 1983 **Price:** \$2.00 **Platforms:** TS 2000, TS 2068

BASIC program makes extensive use of the color and hi-res graphics. Draws a pattern which changes continuously in shape and color.

Multi-Draw 2068

Knighted Computers **Author:** Gary Ward **Date:** 1985 **Price:** \$24.95 **Platforms:** TS 2068

Screen design program with joystick control of dual-multi-function screen cursors which draw, print, define characters, change colors, flash, save/load or print our your creations.

Multigraphics

Bridge Software **Date:** 1982 **Price:** \$12.00 **Platforms:** TS 1000

Create drawings, advertising displays, etc, on screen. 16K.

Multigraphics 2.3

Computer Software Associates **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Menu-driven package gives full control of ZX81 graphics. Includes: Comprehensive sketch pad function, small, large and jumbo text functions. Two packages of mixed graphic and text displays or one animated display. Educational/tutorial, business graphics functions for shop-window advertising displays. 16K.

TS 2040 or full-size printer. Proportional font spacing.

Kaleidograph

William Don Maples **Date:** 1982 **Price:** \$6.95 **Platforms:** TS 1000

Kaleidoscopic simulation in a 22x22 pixel display composed of randomly selected graphic pixels with 2 axes and a center of symmetry.

LarKen Desk Top Publisher

LARKEN Electronics **Date:** 1990 **Platforms:** TS 2068

Produce high quality printing with an Epson compatible printer and LKDOS. Page is kept on disk and scrolling through the page is as easy as clicking on the joystick or mouse on the icon menu.

Masthead Package #2

Lemke Software Development **Date:** 1989 **Price:** \$14.95 **Platforms:** TS 2068

Math UDGs

Frank Lockhart **Date:** 1985 **Price:** \$9.95 **Platforms:** TS 2068

Now you can have fractions and Greek letters (those not already in the alphabet) for your math programs.

Mega-Plot

Datacon Corporation **Date:** 1983 **Price:** \$19.50 **Platforms:** TS 1000

Graph producing program. Accepts data via keyboard or data tape and illustrates it in a graphic way. Several forms are included along with digital summaries. 16K.

Metagraphics

Calliope Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Create elaborate drawings with over 2,000 different graphics characters and backgrounds. 16K.

Software

Mysterious Matrix

EZRA GROUP II **Date:** 1983 **Price:** \$2.80 **Platforms:** TS 1000
Plots a matrix of patterns defined by input. Listing, 16K.

Omnigraph

Pegasus Micro Systems **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 2000, TS 2068

Oscilloscope

JRC Software **Date:** 1984 **Price:** \$2.00 **Platforms:** TS 1000
Eye catching moving graphics. Creates full screen oscilloscope patterns that quickly rotate in real time and appear 3-D.

Pic-Plot

John McMichael **Date:** 1988 **Price:** \$8.95 **Platforms:** TS 2068
Utility program, probably to print images to the CBM 1520 printer via the 2068/1520 interface.

PIX-FX

Ed Grey Enterprises **Date:** 1989 **Price:** \$25.00 **Platforms:** TS 2068
Add special effects to a saved screen file, including wrapping around a globe, change perspective, magnify, reduce and merge. Graphical user interface. Supplied on tape or disk.

Pixel Drawer

Dynacomp, Inc. **Price:** \$14.95 **Platforms:** TS 1000
16K.

Pixel Print PLUS!

Lemke Software Development **Date:** 1988 **Price:** \$19.95 **Platforms:** TS 2068
Desktop publishing program, WYSI-WYG (what you see is what you get).

Pixel Print Professional!

Lemke Software Development **Date:** 1989 **Price:** \$29.95 **Platforms:** TS 2068
Based on Pixel Print Plus! desktop publisher. Bank-switching for perfect page layout, 64 column printing.

Available for cassette, AERCO disk, A&J Microdrive, Oliger disk, LarKen disk and Zebra disk. Most version require a 32K RAM cartridge. LarKen requires 64K RAM disk.

Pixel Sketch and Graphics Editor

Lemke Software Development **Date:** 1986 **Platforms:** TS 2068
Graphics design program that works with the standard, extended color and high resolution video modes. Uses joystick and simple key commands to draw and edit graphic designs.

Plotter 1

J. C. Software **Date:** 1982 **Price:** \$9.99 **Platforms:** TS 1000
Routine that plots and graphs any function. 16K.

Plotting Work Sheet

EZRA GROUP II **Date:** 1982 **Price:** \$3.95 **Platforms:** ZX81, TS 1000
1K.

Plotting Work Sheet SLOW

EZRA GROUP II **Date:** 1982 **Price:** \$6.95 **Platforms:** TS 1000
16K.

Poly-Scroll

Lemke Software Development **Platforms:** TS 2068

Print Factory

Byte Power **Price:** \$27.95 **Platforms:** TS 2068
Print any type of document (poster, etc).

Software

Slide Show

Mindware, Inc. **Date:** 1983 **Price:** \$22.95 **Platforms:** TS 1000
Create your own video slide shows for retail displays, seminars, and exhibits. 16 different displays with large and small letters and a wide variety of graphic elements. Display can run continuously. Adjust the length of time each display. 16K.

Spectrex

Syber, Inc. **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000
Creates true perspective drawings from user defined data points; viewing angles may be changed at will. Data is entered only once and is maintained by resident file manager. 16K.

Supershaper

C. W. Associates **Platforms:** TS 2068
Create graphic characters on screen by joystick or entering binary or decimal values. Characters displayed for editing, saved to tape, automatically loaded into data statements. Two programs and several data arrays; multiple character starter library; tutorial on character graphics.

SW-HI-RES

Nissim Elmaleh **Date:** 1983 **Price:** \$20.00 **Platforms:** TS 1000
Create character/symbol set, plot 255x174 pixels via 11 functions.

TASCOPY

Tasman Software **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068
Output grey-scale screen copies of color screen images to your printer equipped with a TASMAN interface.

The Companion

Byte Power **Price:** \$27.95 **Platforms:** TS 2068
4 cassette tapes of images, fonts and more for Print Factory.

Random Fences

EZRA GROUP II **Date:** 1983 **Price:** \$1.80 **Platforms:** TS 1000
Plot random fences scrolling up the screen. Listing, 16K.

Scovi

Syber, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Software video inverter. Auto-merges with programs. 16K.

Screen Copy Program

Softest **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 2068, ZX Spectrum
Allows Spectrum screen to be copied onto a Tandy CGP-115 four color printer/plotter when used with Softest CGP-115 interface. Scans screen horizontally and sends printer information to Tandy printer. Colors mapped to printer's four colors. Requires Spectrum ROM adapter.

Screen-to-Plotter

John McMichael **Date:** 1988 **Price:** \$8.95 **Platforms:** TS 2068
Utility program, probably to print images to the CBM 1520 printer via the 2068/1520 interface.

Sign Designer

Zebra Systems, Inc. **Model:** C281 **Date:** 1986 **Price:** \$19.95 **Platforms:** TS 2068
Create signs that include text and graphics.

Sketch-A-Screen

American Micro Products, Inc **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000
Two programs: sketchpad and scrambled letter puzzle. Computerized sketchpad with eight directional controls for using the plotting cursor. User must arrange the letters in a given order using four direction controls in scrambled letter puzzle. 16K.

Software

TMS9918A VDP Enhanced BASIC Programming Cassette

John Oliger Co. **Date:** 1985 **Price:** \$6.95 **Platforms:** TS 1000
For use with the TMS9918A Video Project/Upgrade.

User Design Graphics toolkit

Hawg Wild Software **Author:** Andre Jackson **Date:** 1985 **Platforms:** TS 2068

Video 3-D

John McMichael **Date:** 1990 **Price:** \$9.95 **Platforms:** TS 2068
Generate 3-D images from grayscale images captured with the SMUG video digitizer. Normal and inverted effects, four selectable Z-axis depths. Can be auto-colored.

VideoCopy

John McMichael **Date:** 1990 **Price:** \$9.95 **Platforms:** TS 2068
Software to print grayscale images captured from VCR with the SMUG video digitizer on an Okimate 20 printer with IBM parallel (Centronics) interface. Black and white and high resolution auto-colored versions. Color editor for user-assigned colorizing.

VideoTex

John McMichael **Date:** 1990 **Price:** \$9.95 **Platforms:** TS 2068
Software to capture and edit grayscale images captured from VCR with the SMUG video digitizer.

Viewpoint

ACS Software **Date:** 1983 **Price:** \$14.00 **Platforms:** ZX Spectrum
3-D graphics package. Routines for rotating wireframe images in three dimensions.

VU-3D

Timex Computer Corporation **Model:** 06-1002 **Author:** Psion **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 2068
Sophisticated design and modeling program. VU-3D lets you create any object on the screen which you can then modify, expand, reduce, shade, color, zoom in or out, or rotate to view the object from other 3D-like perspectives.

ZX Hi-Res

Callisto Software **Author:** James Hastings-Trew **Date:** 1985 **Platforms:** TS 1000
Toolkit for high resolution graphics. Upper and lower case text, 128x192 resolution, graphics routines.

Software

TS1000 HOME IMPROVEMENT PROGRAM

CHOOSE AREA OF INTEREST BELOW

- 1 HOME DIMENSION SPECIFICATIONS
- 2 CARPETING YARDAGE ESTIMATION
- 3 INTERNAL PAINTING ESTIMATION
- 4 WALLPAPER ROLL ESTIMATION
- 5 EXTERNAL PAINTING ESTIMATION
- 6 AREA AND DIMENSION CATALOGUE
- 7 DRAW YOUR OWN FLOOR PLAN
- 8 SAVE PROGRAM AND DIMENSIONS

Home

Another popular use for adult Sinclair owners: software to organize home chores like maintaining the household budget or balance the checkbook.

20 Programs Cassette

Computhink, Inc. **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Bar chart, etch-a-screen, interest, spelling, checkbook, more. 2K.

5 2K Family Pack

Timeworks, Inc. **Model:** 1308 **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Five programs for day to day tasks. Memoboard; Serves as family message center. Checkbook Balancer: Simplifies reconciling your check book. Recipe Recorder: Stores up to 60 recipes on a C-60 cassette for easy recall at any time. Mini Money Manager: Helps you plan and track your household budget. Homework Helper: Turns your computer into a tool for math or science homework. 2K.

ABC, Etcetera

William Don Maples **Date:** 1983 **Price:** \$1.50 **Platforms:** TS 1000
Alphabetizes lists of names, titles, terms, etc. 20 characters long. Length of list: 65 for 2K RAM, add 50 for each additional K. 700 maximum. 2K.

Address Book

WMJ Data Systems **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000, TS 2068
Track important names, addresses and telephone numbers. Mailing labels may be cut out of printout. Spreadsheet format. 16K.

Address Book

Intercomputer, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Store entire address and phone list. Add, change or delete names. Print an entire list in alphabetical or zip code order, including mailing labels. Entries coded for special purposes, e.g., card list, will be printed by code. 16K.

Address Book

American Micro Products, Inc **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000
Create a database of up to fifty names, addresses, and telephone numbers. Search the database using names, telephone numbers, and zip codes as the search criteria. 16K.

Address Book

R. A. Tec. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Keep track of up to 100 names, addresses, and phone numbers per tape. 16K.

Address Book

Markel Software **Author:** Mark Fendrick **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 2068

Appointment Watch

WMJ Data Systems **Date:** 1984 **Price:** \$12.00 **Platforms:** TS 1000, TS 2068
Spreadsheet that stores up to 100 appointments. Stores date, time, and place of your appointments, with whom they are and the subject of the meeting.

Artificial Intelligence Telephone Book

Frog Software **Date:** 1983 **Price:** \$3.95 **Platforms:** TS 1000
Holds about 85 entries. Search by name, address, phone number. 16K.

Astro-Data

J. Brunet **Date:** 1984 **Price:** \$10.50 **Platforms:** TS 1000
File system with options of the twelve signs of the Zodiac. Gives information on character, destiny, future career and more.

Software

Auto Analyzer

Timex Computer Corporation **Model:** 06-2003 **Author:** Rudolph Daniel **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 2068

Keep your car in tip-top shape. Tracks all automotive maintenance and lets you know when next service is due. Diagnostic aids helps you pinpoint needed repairs.

Auto Diagnostic

UAS **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 1000

Select your problem areas and the computer will perform a decision tree analysis to pinpoint trouble spots. 16K.

Auto Record Keeper

Software Development Associates **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000

Keep a record of such items as gas, oil, repairs, car payment, insurance etc. Various screen displays provide year to date expenses, miles per gallon, and cost per mile. 16K.

Automobile Analyzer

Timex Computer Corporation **Model:** 03-2011 **Author:** Rudolph Daniel **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Keep your car in tip-top shape. Tracks all automotive maintenance and lets you know when next service is due. Diagnostic aids helps you pinpoint needed repairs. 16K.

Bartender’s Window

Simulusion **Author:** Sean La Motte **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

A menu of drinks appears on the screen, offering an instant recipe mixing guide. Press the call-letter of any drink and its mixing directions immediately appear. Designed to overcome the problem of mixing drinks in dark places and to provide a stimulating answer to the question: Why is that computer sitting at the end of the bar? 16K.

Bill Organizer

Intercomputer, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Keeps track of all your bills, stores amounts and dates due, minimum payments, and finance charges. Schedule your payments by computer as it organizes your bills according to due dates. Summarizes and totals all bills from the same vendor and displays your annual costs, e.g., electric, at the end of the year. Tax deductible finance charges are also totaled. 16K.

Biorhythms

Softsync, Inc. **Date:** 1982 **Price:** \$14.95 **Platforms:** ZX81

Biorhythms
International Publishing & Software Inc **Date:** 1982 **Price:** \$11.95 **Platforms:** TS 1000

Helps you “track” your up and down cycles for intellectual, emotional, and physical factors. Lets you know what phase of your personal biorhythm cycle you are experiencing on any specific day. The program is supplied with a detailed booklet explaining the theory and application of biorhythms. 16K.

Biorhythms

MAH Software **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000

Calculate physical, mental and emotional cycles for any given day or three week period.

Bookworm

Magic World Software **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 2068

Manage a book or record collection. Program presented in Syntax v5n5.

Budget Account

P. Nethercot & R. Rackstraw **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000

Keep track of where the money goes; see why you are always in the deficit at the end of the year. Allows for annual review, printout status, shows amount budgeted per item, amount spent and balance re-

maining, percentage, and total spent each month. 16K.

Budget Master 1000

Human Engineered Software **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000

Household budget program; user controlled categories; displays totals in monthly, year-to-date, and average formats.

Budget Minder

Games to Learn By, Inc. **Author:** Richard Roberts **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068

Home budget program. Automatic billing, graphs of bills.

Budgeting

UAS **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

The program guides you through the generation of a practical way to budget. Significant expenses are highlighted and suggested corrections are derived by recursive routines. 16K.

Burglar Alarm

Ron LeMon **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Protect home, business, car, etc. Fool-proof. Extra parts required. 2K.

Calendar Planner

I. M. S. Enterprises **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 1000

Scratchpad calendar. Up to 200 personal events may be filed. Add or delete anytime. Files stay in order by date. 12 search modes; display appointments. Allows viewing by week, month or year.

Calendarfile

Synergics Unlimited **Date:** 1983 **Price:** \$12.50 **Platforms:** TS 1000

Establish your own data bank of appointments, reminders, important dates and recurring events. Access data by month, date, subject or keywords. 16-64K.

Software

Calorie Counter

Foote Software **Price:** \$9.95 **Platforms:** TS 1000, TS 2068

Car Log
Nimrod Software **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Complete record of mileage and itemized expenses. Reports on ratios, totals and projections. 16K.

Check

Dale Lipinski Software **Price:** \$10.00 **Platforms:** TS 1000

Checkbook for 200-400 transactions. Automatic check number and date entry. Listing of items by outstanding items, name, date or check number either to the screen or printer. With simple reconciliation you get the bank statement balance. Includes print options and allows correction of entry errors. 16K.

Check Book

Intercomputer, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Balance and maintain your checkbook. Find all checks written to one payee easily. Add a printer and it will print checks. 16K.

Check Book

CRC Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Keep track of all your checks. Gives balance after each entry. Lists checks by month. Search for the checks by payee or by check number. 16K.

Check Master

Master Mind, Ltd. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Category assignment and analysis. Complete review, editing and monthly reconciliation. Up to 90 entries. 16K.

Check Register, Inventory
Brittanysft Ltd **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

16-64K.

Software

Checkbook

Dynacomp, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000 16K.

Checkbook

American Micro Products, Inc **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000
Allows the user to enter such information as dates, the check payee, a check use code and the check amount. Maintains a running balance and searches the database using several different criteria. 16K.

Checkbook

Biocal Software **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Balance your checkbook. Outstanding checks, deposits, current balance. 16K.

Checkbook

E & S Software **Date:** 1983 **Platforms:** TS 1000
Balance your books.

Checkbook Balance

P & B Software **Price:** \$9.95 **Platforms:** TS 1000 16K.

Checkbook Balancer

Simulusion **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Reconciles your bank balance to your checkbook balance with a running tabulation and display of both; stores and lists up to 100 uncleared checks and deposits. Graphic Checkbook: Graphic presentation of your ups and downs; generates a four year bar graph of your monthly bank balance. 2K.

Checkbook Helper

Z-West **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000
Prompts for information necessary to examine your checking balance; informs you of any error or balance of your account. 16K.

Checkbook Manager

Timex Computer Corporation **Model:** 03-2003 **Author:** John Heaney **Date:** 1982 **Price:** \$15.95 **Platforms:** TS 1000
Balance your checkbook and gather data for tax purposes. Deposits are loaded by date, amount, and source. Checks are issued by date, amount, payee and classification. A balance is provided after each transaction. Printer and data files are fully supported. 16K.

Checkbook Record

R. S. Panwar **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Store checks, deposits, running balance. Find total deposits, total checks. Search by user defined codes for various categories. Helps in budgeting. Stores data for the whole year. 16K.

Checkbook, Income Tax and Budget Organizer

ZX-Panding, Ltd. **Price:** \$13.75 **Platforms:** TS 1000
Ten jobs in a menu-driven format. Checks and deposits are totaled and itemized under user-defined categories for budget planning and income tax preparation. Makes checkbook balancing easy and 90 transactions can be manipulated at one time with 16K.

Checkbook/Budget

JST Enterprises **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000 2k listing.

Checkbooker

Rheesware **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 2068

Checkmaster

Sikes Software **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000
Enter and store over 450 transactions per load. Menu driven. Allows you to list, search, add, save, graph. Special graph feature allows you to graph checking balance 9 dates at a time, starting with any de-

sired date. Search for credits, dates, and debts. Graph may be scaled and labeled as desired. 16K.

Checkrec

WMJ Data Systems **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000, TS 2068
This program can be used to keep track of all checking account transactions. Will automatically reconcile the account to the bank statement. Spreadsheet format. 16K.

Checks & Balances

Computer-Wear Software **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000
Up to 60 files for easy and accurate transactions. Includes automatic numbering of checks according to your present system. Plenty of room for descriptive info; automatic deposit mode; review by number or payee's name. Auto-save mode saves data.

Collector's Companion, The

Timeworks, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Organize and catalog your collectibles by description (name, serial number, code number), cost, current value, insured amount, and purchase date. Automatically calculates appreciated value and tells you which items are under-insured. 16K.

College Cost Analyzer

Timex Computer Corporation **Model:** 03-2018 **Author:** ITCS Software Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Plan ahead for your children's education! Helps you calculate the cost of a college education and create a savings plan to meet those expenses. Effects of inflation and volatile interest rates can be projected. Covers all types of schools, student's own savings, grants and scholarships, so you can tailor a savings plan to fit your own, personal, circumstances. 16K.

Software

Compatibility

ORBYTE Software **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000 16K.

Computerized Home Intrusion Protection System (C.H.I.P.S.)

A.C.C.S. Labs **Date:** 1984 **Price:** \$28.00 **Platforms:** TS 1000
State of the art security system for home or business. Shows map of your property and location of intrusion by blinking arrow.

Cookbooker

Rheesware **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 2068

Coupon Magic

HD Software **Author:** Bill Erickson **Date:** 1985 **Price:** \$14.95 **Platforms:** TS 2068
Program with three functions: shopping list, coupon manager and general purpose list manager. The shopping list lets you enter items in categories and include the estimated cost. When finished, it will give an the estimated total cost. The coupon manager allows you to store up to 99 coupons with a description. Last, it is a general purpose list manager.

Coupon Manager

Timex Computer Corporation **Model:** 03-2004 **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000
Track of those coupons showing what they are for, where they are offered, and starting and ending dates. You can list them by store or type and bring the computer age into your household, saving time and effort. 16K.

Dates

Data-assette **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Track food and freezer needs. 16K.

Software

Diet Plan

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Easy Z Financial Transactions

Sensible Technical Solutions **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000
Handles all your different accounts (credit card, store credit, checking, savings, etc). Menu driven, self-modifiable, load and save on tape, complete prompting through entire program). 16-64K.

Electric Address Book

User Friendly Software **Date:** 1983 **Price:** \$13.95 **Platforms:** TS 1000
Create, edit, save, print 100 81 character records. 16K.

Electric Cost Analyzer

Timex Computer Corporation **Model:** 03-2019 **Author:** Tim Rossetti **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Calculate the energy usage of appliances and electric devices. 16K.

Electronic Checkbook, The

Timeworks, Inc. **Date:** 1982 **Price:** \$16.95 **Platforms:** TS 1000
Organize and record checking transactions: check or deposit number, description or comment, date, classification code (groceries, entertainment) and amount. Checking balance is computed. Sort and recall transactions by date, description, and classification. 16K.

Energy Analysis

P & B Software **Price:** \$9.95 **Platforms:** TS 1000 16K.

Energy Costs

Steve Karash **Date:** 1981 **Price:** \$5.00 **Platforms:** ZX80, MicroAce 1K.

Finance I

Data-assette **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Balance and maintain checkbook. 16K.

Financial Manager

Z-Ware **Date:** 1982 **Price:** \$8.95 **Platforms:** TS 1000
Home or business. 16K.

Financial Manager 1000

Syber, Inc. **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000
Complete integrated business/home budget, expense, checking and financial management system. Maintains monthly and year to date data for up to 35 user defined categories; numeric and graphic output along with menu driven operation. 16K.

Financial Record Keeper

Markel Software **Date:** 1983 **Price:** \$14.99 **Platforms:** TS 1000
File one year of records in 20 user definable areas. Printer output. Menu driven. Month by month totals, year to date totals, review individual files, or all totaled. Full maintenance routine. Self-starting, self-saving, self-naming (according to the year entered). 16K.

Financial Record Keeper II

Markel Software **Date:** 1983 **Price:** \$24.99 **Platforms:** TS 2068
Financial Record Keeper for the TS 2068. Holds 500 checking transactions. Checks listed according to a number of options (date, check no.) or by endorsee. List year to date totals by endorsee or category. Checkbook reconciliation routine included. Shows which checks have cleared the bank.

Financial Record Keeper Plus

Markel Software **Date:** 1983 **Price:** \$24.99 **Platforms:** TS 1000
All the applications in Financial Record Keeper plus the ability to hold 500 checking transactions. Checks listed according to a number of options (date, check no.) or by endorsee. List year to date totals by en-

dorsee or category. Checkbook reconciliation routine included. Shows which checks have cleared the bank. 48K.

Fire Alarm

Ron LeMon **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Two versions. Extra parts required. 2K.

Forget-Me-Not

Timeworks, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Birthdays, anniversaries, and special occasions are important to remember. Record a dentist appointment, project deadline, or your boss's birthday to be recalled daily, weekly, or monthly. 16K.

Gene-Pro

DML Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Genealogical data storage program. Holds pertinent information to great, great grand parents. For family genealogists.

Healthfile

Synergics Unlimited **Date:** 1983 **Price:** \$10.50 **Platforms:** TS 1000
Maintain family health records. Keep track of family birth data, heights, weights, immunization, illnesses and other health data. File space for doctors and hospitals. Includes basic first aid and poison control data. 16-64K.

Heating System Analyser

Timex Computer Corporation **Model:** 06-2006 **Author:** Tim Rossetti **Date:** 1983 **Platforms:** TS 2068
Not released. Calculates energy costs, lets you evaluate potential savings from adding insulation or completely changing your heating system (i.e., gas to oil).

Heating System Analyzer

Timex Computer Corporation **Model:** 03-2015 **Author:** Tim Rossetti **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Calculates energy costs, lets you evaluate potential savings from adding insulation

Software

or completely changing your heating system (i.e., gas to oil). 16K.

Home Accounting

DSBC **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
Three programs to assist in proper control of home finances. Checking balance, budget, expense file. 16K.

Home Budget

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Home Budget

ORBYTE Software **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Keep running balance of family finances. Three major categories: income, deductible expenses, non-deductible expenses. Small businesses can also use it as a tool for finance management. 16K.

Home Budget

Software Development Associates **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Home financial planning program that lets you budget your expenses into 15 accounts. 16K.

Home Budget Planner

Markel Software **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Computes and compares amount spent versus budget for a 13 month period. 20 user definable budget categories and 10 separate categories for income and deductions. Displays and prints out data by the month or year to date. Bar charts are drawn from monthly averages and show the year at a glance in graphic detail. Menu driven with easy edit and update. 16K.

Home Clock Family Bulletins

King Software **Date:** 1982 **Price:** \$20.00 **Platforms:** TS 1000
Both a clock and bulletin board. Menu for clock control; clock displays time in large numerals. Continuous display of bul-

Software

letins with large text alarm display area. 16K.

Home Equity Evaluation

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Home File

Z-West **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000

Home Finance

CAI Instruments, Inc. **Price:** \$14.95 **Platforms:** TS 1000

Home Financial Package

Florida Creations **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
Mortgage analysis; return on a bond investment; IRA planner. Listings. 1K.

Home Heating Costs

Banta Software **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
An analysis of effects of types and amount of insulation, building size and configuration, climate, and various fuel costs. See what you really can save by using alternative fuels for all or part of your building. 16K.

Home Improvement Planner

Timex Computer Corporation **Model:** 03-2008 **Author:** Ken Frink **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Enter home/room dimensions, calculate carpeting yardage, internal/external paint, wall paper and more. 16K.

Home Inventory

Steve Karash **Price:** \$5.00 **Platforms:** ZX80, MicroAce

Home Inventory

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Home Inventory

ORBYTE Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
List all your household inventory. Maintain up to date valuation of all assets. Useful for insurance purposes. Small businesses can keep current summary of inventory. Ability to log categories, descriptions, inventory numbers, current and replacement costs, remarks. 16K.

Home Inventory

American Micro Products, Inc **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000
Database for keeping an inventory of household possessions. Allow the user to search the files for a particular item or to list all items with a value above a specified value. 16K.

Home Manager

ZOR KHAN Industries **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000
Stores info on 50 families. Names, address, phone and four lines of miscellaneous data (up to 8 important dates). Sort on names or dates. Also includes printer output for address labels or complete files. 16K.

Home Money Manager

International Publishing & Software Inc **Author:** Dick Berry **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Complete home budgeting system. Establish budget categories, track monthly bills and income, see monthly and year-end balance sheet. 16K.

Home Payables

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Home Plan I

Data-assette **Date:** 1982 **Price:** \$8.50 **Platforms:** TS 1000
Diary. 16K.

Software

IRS 1040 (Long Form)

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

IRS 1040 (Short Form)

General Systems Consulting **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000 16K.

Job Jar

UAS **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
Let your computer keep tabs on your odd jobs. Input the time you have available and the program will select a job for you to do. You can add or delete jobs from your own personal job jar. 16K.

Keyboard Calculator

Timex Computer Corporation **Model:** 02-2000 **Author:** J. Gishen **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Perform numerical computations, much like a hand calculator— but considerably more powerful and it’s easier to use. It can be used for statistical, scientific, engineering or financial calculations. 2K.

Kitchen Master

Fun-Tech Software **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000
Keep track of kitchen items; change, delete, add, search for items. Print out grocery list. Adapts to any inventory. 16K.

Library

UAS **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
Organize your books and magazine articles by subject, location, author, title, and also have a key word or phrase search. You can choose the search that you want for each item. 16K.

Library

Biocal Software **Date:** 1983 **Platforms:** TS 1000
Keep track of your books. Search list for author, title, publisher.

Software

Little Black Book

CRC Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

This program is the electronic name, address, and phone number software that turns your computer into a mailing list or instant name, address, and phone number retrieval system. Saves data on tape for permanent use. 16K.

Loan/Mortgage

Softsync, Inc. **Price:** \$14.95 **Platforms:** ZX81

Medical History

SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Compile, store medical and miscellaneous expenses.

Mega-Plan

Datacon Corporation **Date:** 1983 **Price:** \$20.50 **Platforms:** TS 1000

Household financial tool. Assets and liabilities are graphically illustrated, allowing for more accurate planning of your financial future. 16-64K.

Mega-Probe

Datacon Corporation **Date:** 1983 **Price:** \$21.50 **Platforms:** TS 1000

Self analysis/self improvement program, gives IQ tests, aptitude tests, more, and shows you your weak points. 16-64K.

Memo Board

H & H Electronics **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Message center in your home or as a way to send messages to your friends with a ZX/TS computer. Easy to use program includes scrolling display and full editing functions. 16K.

Message Center

Run-It Software Club **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Combines Artist & continuous message program. 2K.

Message Center

S & S Company, The **Model:** T1206/T2206 **Price:** \$10.95 **Platforms:** TS 1000, TS 2068

Different message screen scrolling routines.

Mr. Bartender

LAKAR **Date:** 1984 **Price:** \$6.75 **Platforms:** TS 1000

Lists more than 200 drinks alphabetically and by liquor. 16K.

News Bulletin Board

EZRA GROUP II **Date:** 1983 **Price:** \$1.80 **Platforms:** ZX81, TS 1000

Scroll your message (up to 250 characters) across the screen. Listing, 1K.

Note-pad

Biocal Software **Date:** 1983 **Platforms:** TS 1000

Full screen editor; supports cursor movement up, down, left, and right. Multi-page storage.

Nutrifile I

Synergics Unlimited **Date:** 1983 **Price:** \$12.50 **Platforms:** TS 1000

Develop your own recipe file and access recipe by name, meal or type of dish. Adjust ingredients for different number of servings. Develop menu plans and grocery lists. Holds 30 recipes. 16K.

Nutrifile II

Synergics Unlimited **Date:** 1983 **Price:** \$14.00 **Platforms:** TS 1000

Develop your own recipe file and access recipe by name, meal or type of dish. Adjust ingredients for different number of servings. Develop menu plans and grocery lists. Holds 120 recipes and contains additional nutritional data for menu planning. 64K.

Occasion Calendar

Intercomputer, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Keep track of birthdays, anniversaries, meetings, and all other special events.

Check ahead a day, week, or month at a time and not miss any occasion that might otherwise have been forgotten. Record special notes, such as gift preferences, which will appear alongside each list. 16K.

Party Nibbles and Bites

Simulusion **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Peggy DeRose offers 12 easy, ultra-fast party recipes. Select a letter from the menu and a recipe instantly appears. Includes: bean, cheese, and salmon dips; a cheese ball; pigs-in-a-blanket; and more. Room to add your own variations and favorites. 16K.

Payoff

Ace Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000, TS 2068

Shows true cost of using credit cards and charge accounts. Enter new balances as you pay off or add to your accounts; explore various ways of paying off an account early; handles accounts with two different interest rates; shows month by month balance, finance charge, and required monthly payment.

Payout

Ace Software **Date:** 1983 **Platforms:** TS 1000, TS 2068

Keep track of your spending by category and subcategory. Enter amount and date; entries sorted to category and date order within category. Gives totals for subcategories and categories, dates, amounts, and overall total.

Personal Banking System

J. P. Gibbons **Date:** 1981 **Price:** \$20.00 **Platforms:** ZX80, TS 1000

Keeps track of your personal finance and check your bank statements. 16K.

Personal Banking System

Hilton Computer Services **Date:** 1983 **Price:** \$20.00 **Platforms:** TS 1000

Banking program supports data files; automatic posting of standing orders on

Software

correct dates; facility for listing (with print-out) by category with totals. 16K.

Personal Banking System
Bank Reconciliation Module

Hilton Computer Services **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Used in conjunction with Personal Banking System to match bank statements and PBS records automatically. Highlights all discrepancies, lists uncleared checks, etc. and offers full correction facilities.

Personal Finance Planner

Timex Computer Corporation **Model:** 03-2013 **Author:** American Micro Products, Inc **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000

Perform calculations, finance a house, or a car, keep savings accounts, repay loans and calculate an amortization schedule which can be generated for any of the financial programs. 16K.

Personal Financial Planning
Pack

International Publishing & Software Inc **Author:** James Biers **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000

Personal finance package includes a check book/register program, a mortgage and rule of 78 loan program, net worth and budget programs

Personal Home Finance

Timex Computer Corporation **Model:** 06-2010 **Author:** Peter Hauser **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

Great for weighing the relative merits of different types of investments. An investment module helps to forecast money growth at different interest rates. With the loan calculator, the cost of a loan can be computed from the beginning of loan payments to the retirement of the debt.

Software

Personal Records Storage System

International Publishing & Software Inc
Date: 1983 **Price:** \$29.95 **Platforms:** TS 1000

Personal records are easily stored with this program. 16K.

Philatelist

MCS Software **Date:** 1983 **Price:** \$26.85 **Platforms:** TS 1000

Stamp collection file and investment analyzer. Stores Scott no., description, date purchased, from whom, condition, cost, number of copies. Calculate investment potential and analyze performance. Up to 200 stamps per program.

Phone Book

Dynacomp, Inc. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
16K.

Phone Number Organizer

Steve Karash **Date:** 1981 **Price:** \$5.00 **Platforms:** ZX80, MicroAce
1K.

Phone/Address List

Electro Research **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
16K.

Rapid Finance

Russell Brewer **Date:** 1984 **Price:** \$10.95 **Platforms:** TS 1000

Track finances with up to 19 user-defined categories. Up to 500 entries that include date, category, amount and optional comments.

Record Keeping

Eric Yruegas **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

Keeps track of items in home. Room for comments (serial numbers, location, etc). 2K.

Reminder

Solutions **Date:** 1983 **Price:** \$9.99 **Platforms:** TS 1000

Scan by date to keep track of bills, appointments, birthdays, etc. 16K.

Reminder

Biocal Software **Date:** 1983 **Platforms:** TS 1000

Calendar and appointment book. Make, cancel, change, list appointments. Uses ISAM file technique.

Schedule

Golden Stair, The **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

Enter appointments and short memos in any order. Retrieve them by day, week, month or year. Holds at least 75 items; up to 250. RPNZL application. 16K.

Solar Water Heater Designer

Timex Computer Corporation **Model:** 03-2017 **Author:** Tim Rossetti **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Estimate the cost of a solar heating system verses the more conventional fueled heaters. Weigh the payback period against construction expenses before installing a new or existing dwelling. 16K.

Stamp Collector

Timex Computer Corporation **Model:** 03-2006 **Date:** 1983 **Price:** \$16.95 **Platforms:** TS 1000

Inventory up to 600 Scott numbers in a single session showing quantity on hand, by major classification. Program is completely menu-driven and was designed by a well-known stamp column writer. 16K.

Statement Aid

CRC Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Helps you to balance your checkbook against your bank statement each month. 16K.

Stocks

CAI Instruments, Inc. **Price:** \$9.95 **Platforms:** TS 1000

Software

The Budgeter (cart)

Timex Computer Corporation **Model:** 07-2000 **Date:** 1983 **Price:** \$34.95 **Platforms:** TS 2068

Tracks actual vs. budgeted expenditures and computes the difference. Up to 50 categories of expenses can be recorded for a full year's budget. Bar graph shows how well you're doing. Printer capability and geographical analysis make this program an asset to your household. Command cartridge.

The Carpooler

Timex Computer Corporation **Model:** 03-2005 **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Track of car usage by driver, destination, and date. Rider data can be input and time of departure logged. Checking is done to ensure drivers are not in conflict with themselves (going two places at once). 16K.

The Check Book

Softsync, Inc. **Price:** \$14.95 **Platforms:** ZX81

The Checkbook Manager

Timex Computer Corporation **Model:** 06-2004 **Author:** Purple Sunrise **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 2068

Balance your checkbook and gather data for tax purposes. Deposits are loaded by date, amount, and source. Checks are issued by date, amount, payee and classification. A balance is provided after each transaction. Printer and data files are fully supported.

The Diggles Kitchen

Micro Computer Software UK **Date:** 1982 **Price:** \$9.99 **Platforms:** TS 1000

Series of cassettes to build up a world wide cookery book using the recipes of John and Angela Diggle. 3 vols: World-wide Cookery, European Cookery, Everyday Family Meals. Prompts the user at each stage. 32K of program; about 28 recipes per tape.

T/S-CALENDAR 2000

A.F.R. Software **Date:** 1986 **Price:** \$16.95 **Platforms:** TS 2068

Appointment calendar; holds 180 appointments. Each appointment record is a maximum of 220 characters.

Tape (2) Diet

Roman Software **Date:** 1982 **Price:** \$8.00 **Platforms:** ZX81, TS 1000

Calorie computing and more. 8 programs. 1K.

Tape (3) Home

Roman Software **Date:** 1982 **Price:** \$8.00 **Platforms:** ZX81, TS 1000

House security, more. 8 programs. 1K.

Tape (7) Design

Roman Software **Date:** 1983 **Price:** \$8.00 **Platforms:** ZX81, TS 1000

Computer clocks, more. 8 programs. 1K.

The Budgeter

Timex Computer Corporation **Model:** 03-2001 **Date:** 1982 **Price:** \$15.95 **Platforms:** TS 1000

Tracks actual vs. budgeted expenditures and computes the difference. Up to 18 categories of expenses can be recorded for a full year's budget. Bar graph shows how well you're doing. Printer capability and geographical analysis make this program an asset to your household. 16K.

The Budgeter

Timex Computer Corporation **Model:** 06-2000 **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 2068

Tracks actual vs. budgeted expenditures and computes the difference. Up to 50 categories of expenses can be recorded for a full year's budget. Bar graph shows how well you're doing. Printer capability and geographical analysis make this program an asset to your household.

Software

The Home Asset Manager
Timex Computer Corporation **Model:** 03-2009 **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

A home inventory program that can be invaluable in case of fire or theft. Records date of purchase, place of purchase, description, price, serial number and model number. Optionally yields total value of all assets. 16K.

The Home Improvement Planner
Timex Computer Corporation **Model:** 06-2001 **Author:** Ken Frink **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 2068

Calculate the materials and cost of various home improvement projects at the touch of a few keys. Separate options let you plan the painting of a room or the entire outside of the house. Save the interior and exterior dimensions of your house on cassette and use them when you are faced with future home improvement tasks.

The Loan/Mortgage Amortizer
Timex Computer Corporation **Model:** 03-2002 **Author:** T. J. Software **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Compare the cost of loans from different banks. 16K.

The Money Manager
Timeworks, Inc. **Model:** 1301 **Date:** 1983 **Price:** \$16.96 **Platforms:** TS 1000

Sixteen budget and actual categories on a monthly basis for a 12-month period. Full analysis is provided including budget and actual comparisons, and detail by individual items. Bar charts provide graphic representations of budget and actual amounts for each period. Store information on tape for updating, revision or reference. 16K.

Universal Baseball Card Collection
M. C. Hoffman **Date:** 1982 **Price:** \$10.95 **Platforms:** TS 1000
Customized version of Universal Inventory File. 16K.

Universal Coin Collection
M. C. Hoffman **Date:** 1982 **Price:** \$10.95 **Platforms:** TS 1000
Customized version of Universal Inventory File. 16K.

Universal Comic Book Collection
M. C. Hoffman **Date:** 1982 **Price:** \$10.95 **Platforms:** TS 1000
Customized version of Universal Inventory File. 16K.

Universal Record Album Collection
M. C. Hoffman **Date:** 1982 **Price:** \$10.95 **Platforms:** TS 1000
Customized version of Universal Inventory File. 16K.

Universal Stamp Collection
M. C. Hoffman **Date:** 1982 **Price:** \$10.95 **Platforms:** TS 1000
Customized version of Universal Inventory File. 16K.

Weight Control Program
International Publishing & Software Inc **Date:** 1982 **Price:** \$29.95 **Platforms:** TS 1000
Helps you gain control over your eating patterns. This is not a diet, but an individually tailored, systematic weight loss program of lasting results. It uses a specially designed Personal Status Assessment. Based on your assessment, the ZX81 becomes your monitor and feedback system, allowing you to discretely track yourself against your own model. Research studies prove this system works because of its regular monitoring and feedback. The program comes with a complete detailed Weight Control Guide Book which gives you explicit instructions how to use the program. In ad-

dition a personal data tape for monitoring your progress is supplied. 16K.

Weight-Watcher
Home Applications **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000
Contains database of 200 foods and caloric values by portion with more than 30 common activities to compute minimum daily requirements. Compare daily consumption as a dieting aid. Can be tailored for personal diets or food preferences.

Yard Improvement Planner
Timex Computer Corporation **Model:** 06-2002 **Author:** Ken Frink **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068
Helps user plan for seeding, fertilizing, and caring for plants. Includes eight predefined categories of tasks and 10 others for customizing. Part of the program is a U.S. map displaying information on frost lines and climate conditions. User can key in the pH balance of the soil to find how much lime to buy, etc.

Yearly Datebook
SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Keep track of important, long range dates with this easy to use program. Enter dates for family birthdays, anniversaries, insurance payments, etc. Add full descriptions. As each month begins, list by date, month, or year. 16K.

Z-Exchequer
Sinclair Place **Date:** 1983 **Price:** \$20.00 **Platforms:** TS 1000
Banking program to track deposits, checks, debits, ATM transactions, reconciliation, etc. 26 categories for checks and deposits.

ZX List
Smartware **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
This "mailing list/phone directory" program allows you to store the names, addresses, and phone numbers of up to one

Software

hundred people. Search for entries in a variety of ways. 16K.

ZX Phonest
Micro Da et Fils **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Stores from 100-200 entries including name, street address, city, province or state, postal code, telephone area code, telephone number; add, delete, sort entries; display on screen or print. French and English versions.

ZX Telephone Book
Thomas B. Woods **Date:** 1982 **Price:** \$4.95 **Platforms:** TS 1000
Directory holds 720 names; complete add, edit, delete functions, auto-save and more. Documentation gives a thorough, easy to understand introduction to data base programming techniques. Listing. 16K.

ZX-CALENDAR
A.F.R. Software **Date:** 1986 **Price:** \$16.95 **Platforms:** ZX81, TS 1000, TS 1500
Appointment calendar; holds 25 appointments in 16K, 100 in 32K or 180 in 48K/64K. Each appointment record holds a maximum of 220 characters.

ZX80 Home Computer Package
Lamo-Lem **Date:** 1981 **Price:** \$9.95 **Platforms:** ZX80
Composer, Etch-A-Screen, Electronic Billboard, Checkbook Balancer, Calculator. 1K.

ZX81 Home Computer Package
Lamo-Lem **Date:** 1982 **Price:** \$9.95 **Platforms:** ZX81, TS 1000
Four programs: Billboard: Scrolls a giant banner across the screen. Etch-a-Screen: Draws text and graphics in any direction. Checkbook Balancer: Keeps a running tabulation of your balance. Composer: Plays music as you press the keys. Manual, 2 keyboard overlays in color. 1K.



Miscellaneous

You'll find collections of programs and programs too diverse to categorize here.

1st Class Programs

Byte Power **Price:** \$9.95 **Platforms:** TS 1000

2+Fast

Byte Power **Date:** 1988 **Price:** \$19.00 **Platforms:** TS 2068

Fast load for 2068 (3300 BPS). Will load BASIC, CODEs and arrays up to 2.5 times faster.

2K Program Tape

Just Drop in Software **Platforms:** TS 1000

Software for the TS 1000 without additional memory. Minimum of 5 different programs per tape. Titles include: Address Book, Bank, Anti-Ballistic Missile, Blackjack, Slot Machine. Hangman, Lunar Lander and more. 2K.

4 8K, 1K BASIC Programs

DRRP Software **Price:** \$10.00 **Platforms:** TS 1000

Sketchpad, Combinations of 7, Enterprise (picture only) and Hebrew Tutor.

4x Sideways Billboard

EZRA GROUP II **Date:** 1983 **Price:** \$1.80 **Platforms:** TS 1000

Scroll 1000 characters right to left. Listing, 1K.

8x Sideways Billboard

EZRA GROUP II **Date:** 1983 **Price:** \$1.80 **Platforms:** TS 1000

Scroll 300 characters right to left. Listing, 16K.

Alarm Clock/Alarm Timer

Ron LeMon **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 1000

12 and 24 hour display. Timer up to 100 hours and 10,000 seconds. 2K.

Amateur Radio Lists

Pierce Co. **Date:** 1982 **Price:** \$4.95 **Platforms:** TS 1000

DXCC and QSL manager. 16K.

Astrology

Imre Auersbacher **Date:** 1985 **Price:** \$14.95 **Platforms:** TS 1000, TS 2068
Produces natal horoscopes.

Astrology for ZX81

Active Designs **Date:** 1982 **Price:** \$20.00 **Platforms:** TS 1000

Casts accurate horoscopes in 3 minutes; houses, planets, risings, and moon signs.

Auto-Dialer 1000

Jose R. Moreno **Date:** 1986 **Price:** \$20.00 **Platforms:** TS 1000

Personal telephone director with auto-dialing capability. Stores up to 200 contacts.

Berzxorg, Slots, Screen Streaks, 3-D Grapher, Engraver

M. K. Rossa **Date:** 1982 **Price:** \$2.00 **Platforms:** TS 1000
2K.

Bio-Map

Pegasus Micro Systems **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 2000, TS 2068

Character Creator

Rheesware **Date:** 1984 **Price:** \$15.95 **Platforms:** TS 2068

Christmas Party Package

Florida Creations **Date:** 1983 **Price:** \$10.95 **Platforms:** ZX81, TS 1000

Music: Plays “Jingle Bells”; Christmas Scroll: horizontally scrolls “Merry Christmas” across the screen in large letters; Christmas Tree: automatically draws and decorates a Christmas tree. Listings or tape. 16K.

Clocks and Timers

ZX-Panding, Ltd. **Date:** 1982 **Price:** \$3.75 **Platforms:** ZX81, TS 1000

Three separate programs in a menu driven format. Digital clock constantly displaying the time. Count-up timer allowing

Software

the user to set the starting time. Count-down timer with a moving visual display after time lapses. Displays military or conventional time. 1K.

Coin Collector

Games to Learn By, Inc. **Author:** Allen Freeman **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 2068
Menu-driven program to classify in detail your favorite coins. Files collection for inventory or purchase. Machine code sort.

Compucat

Time X Town/Monixware **Date:** 1983 **Price:** \$4.00 **Platforms:** TS 1000
Catalog plus five programs: calculator, resistor color decoder, CHR\$ peekmaster and barber-pole graphics.

Computer Awareness I

Run-It Software Club **Date:** 1982 **Price:** \$6.95 **Platforms:** TS 1000
4 programs including doing your own menu. 2K.

Computer I/O Data Communications

Thomas B. Woods **Date:** 1986 **Price:** \$16.95 **Platforms:** TS 1000, TS 2068
Lets your 2068 speak to your TS 1000. Use your TS 1000 (must have 64K RAM) to store data for your 2068. Send commands which transfer data back and forth, or cause the TS 1000 to execute your own special BASIC commands. Software includes operating system for both computers.

Requires two Universal I/O Port boards, one for each computer.

Computer Poster

JRC Software **Date:** 1984 **Price:** \$5.95 **Platforms:** TS 1000
Abstract design, 22 feet x 4 inches. Includes poster program. 2K.

Crosswise

Game Room, The **Date:** 1983 **Price:** \$6.00 **Platforms:** TS 1000
Crossword game for two players. 16K.

Cryptography Software

Del Products, Inc. **Date:** 1984 **Price:** \$5.95 **Platforms:** TS 1000
For crypto-secure communications, tape records, etc. Accepts plain text or cipher from keyboard or tape, output to screen, printer or tape. 2K.

Cypher 9

Robill Products **Date:** 1982 **Price:** \$39.95 **Platforms:** TS 1000
Menu-driven, multi-featured cipher generator with encode/decode/scramble and two save options for secure communications. Frequency analysis is inhibited and convenient cipher changing allows security comparable to “one-time pads.” 16K.

Darkstar

F/22 Press **Date:** 1983 **Price:** \$99.95 **Platforms:** TS 1000
Solve darkroom problems of exposure and processing times for black-and-white and color work. 16K.

Day

Bob Woish **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000
Enter the date and your computer outputs the day of the week it fell on (or will fall on). 2K.

Demonstration 1000

Michael B. Williams **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Demonstrate the capabilities of the TS 1000 with games and business displays including machine language routines.

Does Nothing Program

EZRA GROUP II **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
Grunts and groans figuratively but does nothing. Listing. 1K.

Dupe Sheet

Kentronics **Date:** 1984 **Price:** \$5.95 **Platforms:** TS 1000
Checks for duplicate contacts before they are called. Keeps contact number displayed for contest use. Prints calls for records.

DXCC

Kentronics **Date:** 1984 **Price:** \$5.95 **Platforms:** TS 1000
Record ARRL country data. View, print, revise records. Printout of countries worked, confirmed or needed.

E.S.P.

ZETA Software **Platforms:** ZX81
Test your precognition.

First Marathon Training Planner

Evansoft **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
2K and 16K versions.

Fish Locator

Budgetsoft **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068
Use the TS 2068 to analyze the season, weather and solunar tables for any location and determine when, where and how to catch more fish. Author is fishing guide with more than 30 years experience.

Flight Assistant

Creitech **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
16K.

Flight-Planner

Joe Smiley **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
For pilots. Plan entire cross-country flight. True courses, wind correction, ground speed, etc, are all calculated. Maintains database of airport/VOR locations. Will generate checkpoints with enroute VORs.

Software

Four Programs

Overbyte **Date:** 1982 **Price:** \$11.95 **Platforms:** TS 1000
Pack, Chart Your Budget, Client Master, Craps. Pack provides data compression. Client Master is a database for client information. 16K.

Golf Handicapper

John B. Carson, Jr. **Date:** 1984 **Price:** \$20.00 **Platforms:** TS 1000
Compute, save and update golf stroke handicaps for up to 48 players. Handicaps computed according to USGA guidelines for 18 hole courses.

Graphics Billboard

EZRA GROUP II **Date:** 1982 **Price:** \$1.95 **Platforms:** ZX81, TS 1000
Billboard moves upward. Listing, 1K.

Graphics/Moving Billboard

EZRA GROUP II **Date:** 1982 **Price:** \$1.95 **Platforms:** ZX81, TS 1000
Billboard moves sideways from left to right. 1K.

Ham Helper Series

Kraig Pritts **Date:** 1984 **Platforms:** TS 1000, TS 2068
15 ham programs plus 4 non-ham programs on scanners, budgeting and music theory.

Home Brewing

American Micro Products, Inc **Date:** 1983 **Price:** \$17.95 **Platforms:** TS 1000
Teaches the user to brew beer at home. Instruction includes: equipment, procedures, ingredients, and recipes. The program takes the user from preparing the wort to the final racking of the beer in a stepwise and logical progressing. 16K.

Home Pac

Simplex Software **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000, TS 2068
20 programs including: Biorhythms, Comp-U-Sketch, Invader, Micro-Organ (music), Statistics, Regression, Checkbook

Software

Balancer, NPV, CAI, Kaleidoscreen, Animals, Renumber, Machine Language Monitor, Arithmetic Drills and more. 21 page manual.

I Ching
SKOK Software **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000

Log Book
Kentronics **Date:** 1984 **Price:** \$5.95 **Platforms:** TS 1000
Record all log data; recall by call sign or QTH. Printout can be used for QSL card.

Make It To The Top
Computer Ware Publishing **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Blends personality inventory testing with behavior modification training to help you meet your destiny. 6 personality inventory scales; tests are different each time. Analysis of your success personality. Includes behavior modification exercises.

Messenger
Smalltyme Software **Date:** 1984 **Price:** \$15.95 **Platforms:** TS 1000
Create your won banners, headlines, gift or business messages. 16K.

Morse Code
Hawg Wild Software **Author:** Gary Fox (KC9MR) **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 1000
Code practice with built-in audio tone. 16K.

MSDisk
Chia-Chi Chao **Price:** \$5.00 **Platforms:** TS 2068
Converts MSCRIPT to operate on disk and the modification does not take away any usable text space.

Names
Algobit Software **Date:** 1985 **Price:** \$40.00 **Platforms:** TS 2068
Genealogy program. Keep data on ancestors in an easily accessible form. Unlimited number of entries using cassette tapes.

AERCO Centronics printer interface recommended for use with 80-column printer.

Pace and Splits Calculator
Evansoft **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
2K and 16K versions.

Personal Computer Software for Timex-Sinclair 1000
DataQuester **Platforms:** TS 1000
Checkpoint Charlie: Match your wits against the computer. It's up to you to break the code before the bomb explodes. Checkbook Manager: Balance your checkbook in minutes instead of hours. Shows final account overview. States & Capitals: How well do you know your US geography? This quiz gives you the state, you supply the capital.

Personal Computing Package
Frog Software **Date:** 1982 **Price:** \$1.95 **Platforms:** TS 1000
Seven programs: graphs, appointment book, checkbook and games. 16K.

Personality Profile
WHM Software **Date:** 1984 **Price:** \$3.00 **Platforms:** TS 1000
Gives personality assessment after evaluating your responses to specific questions.

Physical Fitness Analysis
B. A. Mullkoff **Date:** 1984 **Price:** \$8.00 **Platforms:** TS 1000
For dieters, health education, or the weekend athlete. Calculates weight loss, pulse rate, target heart rate and ideal weight; includes tables of weight loss and calories used per activity.

Programs for the Basic (2K) ZX81/TS1000
DSBC **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
9 programs designed to show what the basic computer can do. 5 moving graphic games, 4 practical programs. By listing to

screen, shows many useful applications of the BASIC language. 2K.

Push Processing
Bob Woish **Date:** 1983 **Price:** \$3.95 **Platforms:** TS 1000
Use any black and white film at any ASA rating. Enter manufacturer's ASA number and the ASA used for exposure, and the computer outputs development information. 16K.

Runner's Log
Evansoft **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
2K and 16K versions.

Running
ORBYTE Software **Date:** 1983 **Price:** \$18.95 **Platforms:** TS 1000
Computerized guide to running. Computes all information necessary for a personalized, well-rounded running schedule. Advice on diets, exercises, equipment. Helps solve problems common to the sport, keep a "running log" of your progress, stabilize the level you have already attained, and coach you in building to higher levels, even to marathon status. 16K.

Security Plus
Gary Kemper **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Program codes data, records, files, or personal correspondence using a poly-alphabetical substitution cypher system. Impossible to decipher without your "key"; stores on tape or printout.

SixPac
SofTek **Date:** 1983 **Price:** \$25.95 **Platforms:** TS 1000
6 programs: FORTH interpreter/compiler, spreadsheet, inventory, calendar/reminder, household budget, data base management.

Sixtyfive ZX81 Programs
Sussex Software House **Price:** \$7.50 **Platforms:** ZX81, TS 1000
65 1K programs.

Software

Stamp Collector
Games to Learn By, Inc. **Author:** Allen Freeman **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 2068
Menu-driven program to classify in detail your favorite stamps. Files collection for inventory or purchase. Machine code sort.

Statistics
R. D. Brennan **Date:** 1984 **Price:** \$10.95 **Platforms:** TS 1000
Keep up-to-date statistics on your favorite team and players. Predict scores of upcoming games with amazing accuracy. Programs for football, hockey, baseball and soccer.

Stopwatch
William Don Maples **Date:** 1983 **Price:** \$1.50 **Platforms:** ZX81, TS 1000
Times events to 9 1/2 minutes in length; accurate to 1/10 sec. 1K.

Super ZXClock
Ventamatic Micro Informatics **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Giant display up to 10ths of second. Mini-display up to 100ths of second. 10 chronometers. Musical alarm. 16K.

SYNCZX
Frog Software **Date:** 1982 **Price:** \$6.95 **Platforms:** TS 1000
Artificial intelligence program with natural language capabilities. 16K.

Talk5
HAWC Programming **Date:** 1984 **Price:** \$9.00 **Platforms:** ZX81, TS 1000

Tap Writer
EZRA GROUP II **Date:** 1982 **Platforms:** ZX81, TS 1000
Handicap aid. Free.

Software

Tape (10) General

Roman Software **Date:** 1982 **Price:** \$8.00 **Platforms:** ZX81, TS 1000
One program from each of the other 9 tapes. 1K.

Tape (6) Geometry

Roman Software **Date:** 1982 **Price:** \$8.00 **Platforms:** ZX81, TS 1000
Pythagorean Theorem and more. 8 programs. 1K.

Tarot

J. M. Yocum **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Personal card interpretation.

Tarot

SKOK Software **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000
78 card tarot readout (keltic). Graphics plus divination.

The D.U.S.

Byte Power **Date:** 1988 **Price:** \$29.95 **Platforms:** TS 2068
For LKDOS cartridge.

The Economy Trio

ZX-Panding, Ltd. **Date:** 1983 **Price:** \$8.75 **Platforms:** ZX81, TS 1000
Three programs available on separate cassettes combined onto one cassette: Clocks and Timers, Your Special Day and Anypoint Plotter. 1K.

The Handicapper

Knighted Computers **Price:** \$1,985.00 **Platforms:** TS 2068
Use your TS 2068 to improve your performance at the track. These programs for thoroughbreds, harness horses, and greyhounds combine the power of your computer with the savvy of a veteran handicapper. Spend a few minutes entering data, and The Handicapper will rank the horses or dogs in each race. All the information is readily available from the thoroughbred racing form, harness, or greyhound track program.

Horse racing factors include speed, class, past performance, post position, stretch gain, beaten favorite, jockey or drivers record, weight (for thoroughbreds) and parked out signs (for trotters). Greyhound factors include speed, past performance, class, favorite box, kennel record, breaking tendencies, and beaten favorite.

Complete instructions and wagering guide included.

The Starter

Timex Computer Corporation **Model:** 02-3000 **Date:** 1981 **Platforms:** TS 1000
Life, Maths and Averages. 2K.

The Worx!

NovelSoft **Author:** Cameron Hayne **Date:** 1986 **Price:** \$19.95 **Platforms:** TS 2068
Assortment of programs including a planner, notepad, calculator and more.

Tower Billboard

EZRA GROUP II **Date:** 1983 **Price:** \$1.40 **Platforms:** ZX81, TS 1000
4x/8x vertical scroll. Listing, 1K and 16K.

Training Program

Evansoft **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Develops individualized running program based on user's age, sex and condition. 16K.

TS/VIC-20 Bible Pack

Jorge Sampson **Date:** 1984 **Price:** \$39.93 **Platforms:** TS 1000
Design/build any peripheral imaginable. Includes cassettes.

Upload 2000

E-Z Key **Author:** David Ornstein **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 2068
TS 1000 to TS 2068 program converters. Works only for programs written in BASIC.

Software

Vins Francais

TAG Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
French wine guide. 16K.

Vu-File (2068) patch

Falmouth Computer Service **Date:** 1985 **Price:** \$8.00 **Platforms:** TS 2068
Patch to Vu-File (2068) which allows single tape loading.

WA-TOR

Thomas B. Woods **Author:** Fred Nachbaur **Date:** 1986 **Price:** \$16.95 **Platforms:** TS 1000
Ecology simulation program which first appeared in Oct '84 issue of Scientific American. WA-TOR recreates the ecology of 3 independent species. You can experiment by changing populations, feed cycles, reproduction, etc. Watch generations pass on the TV screen. Generate HI-RES population curves on the 2040 printer. Uses Nissim Elmaleh's "SHR" for the cover screen and graphing routines.

WAS

Kentronics **Date:** 1984 **Price:** \$5.95 **Platforms:** TS 1000
Record ARRL state data. View, print, revise records. Printout of states worked, confirmed or needed.

Weathercaster

Imre Auersbacher **Date:** 1985 **Price:** \$14.95 **Platforms:** TS 1000, TS 2068
Programs for predicting local, short term weather: computing relative humidity, dew point, temperature-humidity index, wind chill factor. Warning messages for heat stress, heatstroke, and frostbite. 2K.

Year at a Glance

Silicon Mountain Computers **Author:** Fred Nachbaur **Date:** 1987 **Price:** \$9.95 **Platforms:** TS 1000
Year-at-a-Glance calculates any year between 1800-2099, showing the whole year on a single screen. Press "M" to give the month legends, "D" for day-of-the-week. Move the cursor around the calendar

to highlight any date, then press ENTER: you're shown your appointments or other significant events for that date. Move the cursor to a non-date field, and you can view the entire database. Comes with the calendar for 1987.

Programmed in SRAM HI-RES Extended BASIC.

Your Key Colors Using Numerology

I. M. S. Enterprises **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Learn the colors you emanate and characteristic meanings. 16K.

Your Special Day

ZX-Panding, Ltd. **Date:** 1982 **Price:** \$3.75 **Platforms:** ZX81, TS 1000
Enter any date in history and the computer will tell you which day of the week it was. 1K.

ZX-Pack

ZXSystems Software **Date:** 1983 **Price:** \$16.99 **Platforms:** TS 1000
9 games and programs, ranging from 4D tic-tac-toe to ZX-Probe and a savings account balance computing program. 16K.

ZXpert

NovelSoft **Date:** 1987 **Price:** \$19.95 **Platforms:** TS 2068
Artificial intelligence system. Create an expert system on any topic.

```
Addr Hexcode Label Mnemonic
=====Bank=FFFF=====
0000 F3 DI
0001 AF XOR A
0002 11FFFF LD DE,FFFF
0005 C3310D JP init
0008 2A5D5C LD HL,(chad)
000B 225F5C LD (xptr),HL
000E 1843 JR ertr
0010 C3ED11 JP pra2
0013 FF RST 38H
0014 FF RST 38H
0015 FF RST 38H
0016 FF RST 38H
0017 FF RST 38H
0018 2A5D5C LD HL,(chad)
001B 7E LD A,(HL)
001C CD7D00 CALL skip
001F D0 RET NC
0020 CD7400 CALL nxch
0023 18F7 JR 001C
0025 FF RST 38H
0026 FF RST 38H
0027 FF RST 38H
```

Programming Languages, Aids and Utilities

Many Timex/Sinclair owners were serious about programming their computers and developed a large library of tools and aids. Some made programming easier, others added missing functionality or extended Sinclair BASIC.

And, for the more advanced user, there were languages other than BASIC, including Forth and Pascal. Forth was a popular alternative to BASIC: the Jupiter Ace (designed by former Sinclair employees) had Forth built-in. Pascal was a compiled language and a bit more difficult to adapt to the limitations of the Sinclair computers but at least two compilers were produced.

10 Best Routines

Cottage Technology **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000

10 routines with examples. One routine makes it “impossible” to enter wrong data, another aligns columns of numbers by decimal point. Others allow single keystroke menu selection, sorting, rounding.

2068 fig-FORTH

Hawg Wild Software **Date:** 1985 **Price:** \$29.95 **Platforms:** TS 2068

Includes CP Spectrum Forth.

2K Programmer Kit

Human Engineered Software **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Provides beginning programmers with the same time saving utilities previously available only with expanded memory.

4K Toolkit

Kayde Electronic Systems Ltd. **Date:** 1983 **Price:** \$10.55 **Platforms:** TS 1000

A powerful editor for serious BASIC programmers. Offers 11 new facilities: ALTER (replace a string); BYTES (how much free memory); COPY (duplicates program lines); DELETE (deletes a block); FIND (find a string); HELP; INSERT (merge two programs); KEEP (keeps a block of lines by storing them above RAMTOP); MOVE (move lines within a program); RENUMBER; VERIFY.

Requires Kayde 4K Graphics ROM option.

4X Characters

EZRA GROUP II **Date:** 1983 **Price:** \$1.40 **Platforms:** TS 1000

Listing, 1K.

8K ROM Character Generator

EZRA GROUP II **Date:** 1983 **Price:** \$2.80 **Platforms:** ZX81, TS 1000

Where it is and how it works. How to use it for 4x or 8x characters. Listing, 1K.

8X Characters

EZRA GROUP II **Date:** 1983 **Price:** \$1.40 **Platforms:** ZX81, TS 1000

Print up to 8 characters on the screen. Listing, 1K.

ACS Assembler

ACS Software **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

Two pass assembler. Designed to run alone or with ACS Disassembler and/or ACS Debugger. 16K.

ACS Debug

ACS Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Machine code debug program. Provides register contents, memory search, block move, memory list, etc. Can be used with ACS Assembler and ACS Disassembler. Works in decimal. 16K.

ACS Disassembler

ACS Software **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

Disassembler with full Z80 mnemonics. 16K.

Advanced Machine Code Monitor

Mindware, Inc. **Price:** \$24.95 **Platforms:** ZX81

Disassembler/monitor.

Assembler

Zunk Custom Electronics **Date:** 1988 **Price:** \$12.50 **Platforms:** TS 2068

Decimal-based assembler that includes converter for hexadecimal/decimal/binary/2-byte values.

Assembler

Memotech **Date:** 1983 **Price:** \$49.95 **Platforms:** TS 1000

Code and edit a source program in the Z80 language and assemble it into machine code. Editor mode allows you to code directly in the right format, manipulate individual lines and control the exact placing of source and machine code. Routines may be merged or listed. Assembler mode han-

Software

dles all standard Z80 mnemonics, numbers in hex or decimal, comments and user selected labels.

Assembler

Discount Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Write machine language programs.

Assembler

JRC Software **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000
Two pass assembler that has all the Z80 instructions plus the ZX calculator language. Makes your work easy through use of labels, variables, table, text, and simple expression evaluation. 16K.

BASIC Handyman

Z-Ware **Date:** 1982 **Price:** \$6.95 **Platforms:** TS 1000
Subroutine that will streamline program. Sorting, searching, data file handling, screen save, graphs and special functions.

BASIC Renumber

Frank Lockhart **Date:** 1985 **Price:** \$9.95 **Platforms:** TS 2068
Automatically renumbers programs written in BASIC. You choose starting line number and line increment.

BASIC*OLAY

SiriusWare **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Permits the full use of 64K RAM. Overlay/copy BASIC program segments.

BAZIX

Richard LeFebvre **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
Extension to Sinclair BASIC with six machine language functions. Label permits GOTO or GOSUB to label name instead of a number. All labels listable. RENUM renumbers; SPACE gives number of bytes free; VARS lists all variables; ELIML removes a range of lines; ERASEV removes any variable, freeing space.

BDLS

Ultimate Blackwood, The **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
Delete or copy blocks of program lines. Scroll through program easily. Relocatable. 16-64K.

Bidirectional Dictionary

Joseph L. Hartmann **Date:** 1982 **Platforms:** TS 1000
2 lists: decimal op code to assembler mnemonic and vice versa.

CFASTDATA

Cosmonics **Date:** 1983 **Price:** \$20.00 **Platforms:** TS 1000
Provides all of the capabilities of CIOUTIL, but 6 times faster. Writes data to cassettes and reads data from cassettes at a speed which is 6 times faster than the TS 1000/ZX81 SAVE and LOAD commands.

CFASTDUET

Cosmonics **Date:** 1983 **Price:** \$27.50 **Platforms:** TS 1000
CFASTDATA and CFASTLOAD. When both programs are used, you may LOAD programs and data at a speed which is 6 times faster than the TS 1000 and ZX81 LOAD and SAVE commands. CFASTLOAD can be configured to your needs.

CIOUTIL

Cosmonics **Model:** CS 17 **Date:** 1982 **Price:** \$20.00 **Platforms:** TS 1000
Utility to selectively read and write strings and arrays to a cassette. Routines occupy approximately 500 bytes and require at least 2K RAM.

Compass Compiler

JRC Software **Author:** John Coffey **Date:** 1988 **Price:** \$10.00 **Platforms:** TS 2068
Integer compiler and two-pass assembler. Supports integer expression evaluation, multiple statements per line, one-dimension strings and the following commands: PRINT, CLS, PLOT, INKEY\$, CODE, RUN, STOP, SOUND, FLASH, USR, TAB, AT, OR, AND, REM, BORDER,

Software

Disassembler

AERCO **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
High speed, all Z80 codes.

Disassembler/Monitor

Mikro-Gen **Date:** 1982 **Price:** \$7.95 **Platforms:** TS 1000

Disk-M

T-S Systems **Date:** 1983 **Price:** \$25.00 **Platforms:** TS 1000
Multi-programming system tool providing many capabilities of a disk drive. Features: Storing multiple programs; storing multiple data files separately from programs. Functions: SHIFT, TRADE, CYCLE, DIRECTORY, FETCH, KILL, WIPE, Line Renumber. Block Delete, Total Delete, MERGE, DATA Merge, REMfill and Line Address. Requires 64K RAM.

Ellipses and Circles

EZRA GROUP II **Date:** 1983 **Price:** \$1.40 **Platforms:** ZX81, TS 1000
Listing, 1K.

Enhanced Basic

Personal Software Services **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
32 page tutorial. Hex-decimal conversion as standard. 16K.

Extended Basic

Thomas B. Woods **Date:** 1986 **Price:** \$19.95 **Platforms:** TS 1000
22 new commands for your TS 1000. Advanced screen utilities make your ZX81 look more like a monochrome 2068. Includes READ, DATA, RESTORE, FILL MOVE, LEFT, RIGHT\$. IN and OUT commands give you BASIC control of I/O mapped peripherals which were previously accessed only in machine code. Extended BASIC does not require the use of PEEK, POKE, or USR. Takes up just 3.5K of memory. 24 page manual.

INK, PAPER, LET, GOTO, GOSUB, IF, THEN, RETURN, POKE, OUT, RANDOMIZE, PEEK, IN and RND.

Compiler

Discount Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Compile BASIC programs to machine code.

Compute

Computer Engineering Services (The Jarrett Company) **Author:** Rolf L. Miller **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
A programmable program. Program allows you to assign various mathematical functions to your program variables. Instructions and listing. 16K.

Cross Assembler/6502

Mিনny Electronic Inc **Date:** 1984 **Price:** \$29.95 **Platforms:** TS 1000
Allows for development of 6502 code on the TS 1000.

De-bugger

CLEVA Computer Ware **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Makes writing machine code programs easier. Works entirely in decimal; hexadecimal is not needed. 16K.

Disassembler

Intercomputer, Inc. **Model:** PT4004 **Date:** 1983 **Price:** \$34.95 **Platforms:** TS 1000
Disassemble any assembly language code in memory. Plug in cartridge.

Disassembler

Discount Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Machine code monitor.

Disassembler

Z-Tron International **Date:** 1983 **Price:** \$8.95 **Platforms:** TS 1000
Machine to assembly language. 16K.

Software

EZ Assembler and Editor

Eugene Zweig **Date:** 1983 **Price:** \$14.90 **Platforms:** TS 1000
Enter it yourself using the source listing supplied. Accompanying documentation is an excellent tutorial suitable for schools or self instruction. The construction of the EZ Assembler and Editor is explained for those who would like to know how it’s done, and to make it easy to modify or enhance. 16K.

EZ-HEX

RCO Technical **Date:** 1982 **Price:** \$12.95 **Platforms:** TS 1000
Allows user to read, write, and test machine language programs in hexadecimal code. Menu operations: conversions (hex to decimal and decimal to hex), block moves, program insertions and deletions, set RAM-TOP, save programs (including programs stored above RAMTOP). 16K.

Fast Scrolling

Integrated Data Systems **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000
Short machine code routines to use in BASIC programming. Eight scroll directions. 16K.

fig-FORTH

Jason Olasky **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068
Full fig-FORTH with editor and assembler.

FILE* BASIC

SiriusWare **Date:** 1982 **Price:** \$15.00 **Platforms:** TS 1000
Includes FILE*SYS functions. Save, merge, erase BASIC programs.

FILE* SYS

SiriusWare **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000
Read and write cassette data files.

FILE* VARS

SiriusWare **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Save, restore strings and arrays. Requires FILE*SYS or FILE*BASIC.

Full Screen Editor/Assembler

Oxford Computer Publishing Ltd. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2000, TS 2068, ZX Spectrum
An essential tool for machine code writers, this program represents the state of the art in terms of full screen input, editing, and cursor control, plus 42 column display. Features include auto-line numbering, full expression evaluation, all Z80 mnemonics, text buffer, printer output, decimal or hex input, all the normal assembler directives.

Graphics Toolkit

JRS Software **Author:** Paul Holmes **Price:** \$11.90 **Platforms:** TS 1000
22 machine code routines: draw/un-draw, foreground on/off, border/unborder, fill, reverse, etc. 16K.

Hex Calculator

Wizard Works, The **Date:** 1984 **Price:** \$4.95 **Platforms:** ZX81, TS 1000
Four function calculator program; inter-mix decimal and hexadecimal operations.

Hex Pak

ROMPAK **Date:** 1984 **Price:** \$13.95 **Platforms:** TS 1000
Machine code monitor/editor. 16K.

HEXAS *

SiriusWare **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Symbolic hex assembler written in BASIC. Generates relocatable code.

HiSoft Pascal

HiSoft Systems **Date:** 1984 **Platforms:** TS 2068
Pascal compiler for the TS 2068, adapted from the version for the ZX Spectrum.

HOT Z

Sinware **Date:** 1982 **Price:** \$19.95 **Platforms:** ZX80, TS 1000
Machine language editor and disassembler that gives full screen Z80 assembly language listings with user-supplied labels. Provides full editing functions and debugging facilities with more than 40 commands. Allows single stepping of machine programs with full Z80 register display. 16-64K.

There are four modes, read, assemble, hex edit and single step. The help screens (only in V1.84) are accessed the same way in each screen. The read screen is the default screen and its help screen will tell you how to access the other screens except for step mode, which you can access in the assemble mode help screen.

Version V1.43 is first and oldest version of this program. It has some advantages because of its location in memory.

Version V1.84 is so-called high memory version. The help screens are used in this version by getting into extended mode and pressing the “H” key.

Version V1.95 is a low memory version.

HOT Z-II

Sinware **Date:** 1984 **Price:** \$24.95 **Platforms:** TS 1000
Adds interactive assembler to the disassembler and debugger in Hot Z. Line-by-line assembler checks syntax as you enter Z80 mnemonics and assembles directly to memory. Multiple commands to support program development. 16-64K.

Hot-Z 2068

Sinware **Platforms:** TS 2068
Disassembler/assembler with data displays, ROM floating-point code display, four letter names for commonly used addresses (built-in and user-defined) and more. Features hex code input, two breakpoints, single-step with register, flag, and stack display, LOAD ZX/TS tapes and a powerful

Software

on-the-fly assembler with delete and insert code commands. Saves and loads byte files, prints to the TS 2040, does hex arithmetic, block moves and compares.

There are four modes, read, assemble, hex edit and single step. Press Extended mode and “H” for help. The read screen is the default screen and its help screen will tell you how to access the other screens except for step mode; you need to access the assemble mode help screen for this.

The program always initializes looking at HOME bank code in the read mode. The bank that is displayed on the screen can be determined by the value displayed in the middle of the line of equal signs near the top of the screen.

You can change the chunk spec for the upper 4 chunks with machine code in the single stepper mode or you can change the active chunks for each of the eight chunks by specifying a value at the “DISB” variable. To access this variable, just type in caps, DISB in the read mode. This will take you to the correct address. The first value is the chunk spec with bits for the HOME bank chunks set High. You must be very careful which chunk are set low because you can page out the machine stack and your program will crash.

You won’t have to worry about where your Super HOT Z code is located because it will continue to operate no matter which bank of code it is loaded in. Value FC can generally be used to set the first two chunks to the DOCK bank or EXROM bank. The next value will determine which bank of memory you will look at on the screen. Enter 00 for DOCK, FE for EXROM or FF for HOME bank. To do this, you should go to hex edit mode by pressing the symbol shift key and the “A” key. That will take you to assemble mode. Next press the symbol shift key and the “G” key to take you to Hex edit mode.

Software

It is possible to change the displayed bank by changing the value in the middle of the equal signs. It is also possible to transfer code between banks of memory.

Versions

There are three different versions of this disassembler. The cartridge (AROS) version, the snapshot (EXROM) version and the normal tape version. The tape version can be loaded and run in any of the three banks - EXROM, HOME or DOCK, providing RAM is present.

All versions can disassemble all Timex memory banks.

The EXROM version doesn’t auto boot. To run it, type: CLEAR 32767: OUT 255,128: OUT 244,240: RANDOMIZE USR 32776.

Hot Z AROS

Provided on cartridge. Step through three 64K banks of memory, read, write and execute code anywhere memory is available. 24K ROM.

KPL-Kid’s Programming Language

P & B Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
For kids who like to do graphics programs but find BASIC a bit difficult. 16K.

Linear Search

Thomas B. Woods **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
In-depth treatise on machine language technique for searching data. Construct a fast and highly personalized data base program. 16K.

LOGIC*

SiriusWare **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000
Provides true logic functions: and, or, xor, nor, nand, not.

Machine Code Monitor

Mindware, Inc. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Enter, run, and debug machine code programs independently of BASIC commands. Enter and debug machine code instructions; then test them in operation. Performs hexadecimal arithmetic, copies and moves blocks of data, converts between decimal and hex, examines and modifies locations in memory. Maintains a protected environment for its own system variables and displays. By Taurus Computer Design. 16K.

Machine Code Starter

BARLOG Software **Date:** 1983 **Price:** \$7.00 **Platforms:** TS 1000
Machine language program containing three subroutines: MEMORY LEFT, INVERSE SCREEN, and FILL SCREEN. All three are disassembled and explained to the beginner.

Machine Code Test Tool

R. L. Associates **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000
Utility program and a complete tutorial course book. Enter, test, display and debug hexadecimal machine code routines simply and quickly. This tool is constructed to help the beginner who wishes to explore machine code programming as well as the expert who wants to polish up. 16K.

Machine Code Test Tool for Spectrum and TS2000

Oxford Computer Publishing Ltd. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2000, TS 2068
Lists and displays machine code instructions as they are written. Ideal for both the novice and the expert. With full 32 page tutorial. Hexadecimal conversion as standard.

Machine Language

Italian Connection, The **Date:** 1981 **Price:** \$4.95 **Platforms:** ZX81, TS 1000
1K.

Machine Language Helper

SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Easily enter machine language listings, programs. Convert hex to decimal. Examine ROMs. Manipulate memory any way you can think of; move blocks, bytes; insert, delete ranges of memory. 16K.

Machine Language Monitor

ELCOMP Publishing, Inc. **Price:** \$9.95 **Platforms:** TS 1000

Machine Language Monitor

A&J Micro Drive **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 1000

Machine Language Nit-Pick

Custom Electronics Device Corp. **Price:** \$18.95 **Platforms:** ZX80, ZX81
Look at blocks of memory; load hex code from the keyboard; see the results of program run register by register, flag by flag. Converts hex to decimal and vice versa.

MCoder

Personal Software Services **Date:** 1982 **Price:** \$18.95 **Platforms:** TS 1000
BASIC to machine code compiler.

Memory Scope

Bonnie & Clyde Software **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000
Memory monitor. Enter a starting address and the screen is filled with that second of memory in character form. Interactive cursor highlights a memory location and the value of that location is shown in hex, binary and decimal. Directly edit memory contents.

Memory Window

Seaview Software **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000
View and scroll through memory, displaying contents as hexadecimal, binary, decimal and text.

Software

Mnemosyne Assembler

SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Full-fledged Z80 assembler. Fast load; source editor.

Multiple Screens

T-S Systems **Date:** 1983 **Price:** \$4.00 **Platforms:** TS 2000, TS 2068
Utility to store three different screens in RAM and recall any of them in microseconds.

Multiprogram Demo

SyncWare Co. **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Tutorial on a technique for storing multiple programs in 16K or more RAM at the same time. No machine language knowledge assumed. Cassette illustrates the technique with four games programs: all programs listable. Games are condensed versions of “Syncwars,” “Minotaur,” and “Blackjack.” 16K.

Omni Template

Omni Technology **Price:** \$14.50 **Platforms:** ZX80, ZX81, TS 1000
Template program for developing other programs.

Partial Pascal

Semper Software **Date:** 1983 **Price:** \$30.00 **Platforms:** TS 1000
Subset of Pascal for the ZX81/TS 1000. Includes if, then, else, case, of, otherwise, while, do, repeat, until, for, to, downto, begin and end for program control; read, readln, write, writeln, reset, rewrite, eoln, eof, inkey and text for input and output; +, *, div, mod, abs, chr, odd, ord, pred, succ and sqr for calculations; not, and, or for decisions; procedure, function and forward for subroutines; const, type, var, array, boolean, char and integer for data; copy, fast, slow, pause and halt for computer control; plot and point for graphics; and mem, mem2, memw, move and usr for machine language.

Software

Partial Pascal was a three step compiler/interpreter. In the first step, the user specifies the input and output channels (screen, printer, tape) for the subsequent steps and edits the program. The second stage complies the program. And the third stage provides an interpreter that runs the program. 16K.

PEEK, BASE, PPU Utilities

Joseph L. Hartmann **Date:** 1982 **Price:** \$24.17 **Platforms:** TS 1000

PEEK displays 100 memory locations in decimal (BASIC). BASE gives conversions of octal, decimal, binary, hex, hibyte/lobyte (BASIC). PPU is a PEEK and POKE utility, a fully documented monitor (BASIC and machine code).

Polykeys

Jerry Till **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000

Replaces INKEY\$ function. Use two or more keys at the same time in your BASIC programs. Relocatable listing.

ProgMerge

ACS Software **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000

Utility for the merging and renumbering of BASIC programs. Renumbering routine can be used on its own.

Program-Manager

Computer Assistance Incorporated **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

BASIC and machine code program monitor and utility. Functions include: renumber, copy, delete, search, dump, hex load, hex debug, and a condense mode that reduces program memory size. 16K.

Programmable Moving Display

JRS Software **Price:** \$4.95 **Platforms:** ZX80

Program offers ability to write true moving and flicker-free displays with no machine-code experience. Cassette with 1k, 2k versions and 3 example programs.

Programmer’s Toolkit

JRS Software **Author:** Paul Holmes **Date:** 1981 **Price:** \$14.95 **Platforms:** TS 1000

Machine code routines write better, faster, and more elaborate programs. Renumber program lines, search and replace any character, insert a wait condition to stop the program until a signal is input, hyper graphics mode, and more. Compatible with the graphics kit and can be loaded with it, making a powerful programmer’s aid.

Programmers Aid

Discount Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Four machine code routines.

Programmers Toolkit and Graphics Routines

Upstate Labs **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

ROM cartridge that plugs between the computer and RAM pack, printer, etc. The toolkit portion contains commands that will renumber, delete, generate, shorten, byte dump, search and replace and more. The graphics commands include: scroll up, down, left and right; invert screen; fill screen; turn background; define. The cartridge uses 12K to 16K block of RAM.

Also available as a cassette for those who have a Hunter board or 64K RAM pack.

ProgStore Toolkit

ACS Software **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Utility for adding subroutines from tape to a main program. Comes with subroutines for hexloader, hexlister, progstore expansion, renumber.

PROM Burner

RAm **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Programming software for use with the Prom Burner Development System.

Software

Screen Kit

Mindware, Inc. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Series of machine code routines for use in BASIC programs. Execute complicated operations with a few commands: Draw any size border; clear part or all of the screen; slide screen up, down, right, or left; invert video on part or all of the screen; create a flashing cursor; find how much memory is left; load any character to the whole screen; save and load BASIC variables only to create data files.

Screen Machine

SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Program inputs like on mainframe computers. 1K machine language sub-routine allows inputs anywhere on screen, complete error checking, automatic formatting (dates, decimals), and advance directly to next prompt. Easy interface to programs; one string and a GO SUB. Saves valuable programming time and looks more professional. 16K.

Screen Power

Panda Software **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000

Added functions for screen programming. 16K.

Sort

Thomas B. Woods **Date:** 1982 **Price:** \$4.95 **Platforms:** ZX81, TS 1000

Data collating/sorting tool. Count and file thousands of items in up to 29 categories with just 1K RAM. Listing and text provide in depth review of BASIC programming techniques. An instructional aid to beginning programmers.

Quickdrive

Micro-Load **Date:** 1984 **Price:** \$12.95 **Platforms:** TS 1000

17 machine language and utility routines to incorporate in to user programs. Includes CLS/screen fill, inverse, border, input check, graph 1 and 2, scroll (4 directions) and more.

Rampager

Robotec, Inc. **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 1000

Machine code monitor/editor. Entirely in machine code, loads in 75 seconds. 16K.

Reline

CRC Software **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Renumber BASIC programs. 16K.

Renum

Bob Brown **Date:** 1983 **Price:** \$5.00 **Platforms:** TS 1000

Self-loading line renumber routine that handles GOTOs and GOSUBs; rennumbers a BASIC program in 5 seconds. All machine code.

Renumber

Peak **Date:** 1983 **Price:** \$1.00 **Platforms:** TS 1000

A line renumbering routine for your programs. Allows you to insert quickly new lines and program statements. 2K.

ROM Reader

Utilities Engineering **Date:** 1983 **Price:** \$12.45 **Platforms:** TS 1000

Translates the contents of the Sinclair BASIC operating system into Z80 mnemonics, hexadecimal of codes, and “nn” data from the PEEKed decimal values. 16K.

RPNZL

Golden Stair, The **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000

Reverse Polish Notation ZX81 Language is a FORTH-like language. Faster than Sinclair BASIC, support for structured code and faster tape load/save. 16K.

Software

Sorting

Italian Connection, The **Date:** 1981 **Price:** \$4.95 **Platforms:** ZX81, TS 1000 1K.

Spectrum Forth

Hawg Wild Software **Author:** M. Hampson **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 2068, ZX Spectrum
Implementation of Forth for the Spectrum.

Sprites 2068

Zebra Systems, Inc. **Model:** C421 **Author:** Vernon Tidwell and Ron Ruegg **Date:** 1986 **Price:** \$19.00 **Platforms:** TS 2068
Fixed implementation of sprites code from the TS 2068 technical manual. Includes 34 page manual.

SRAM Hi*Res Extended BASIC

Silicon Mountain Computers **Author:** Gregory C. Harder, Fred Nachbaur **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000
Thirty-eight new commands extend graphic capabilities of ZX81/TS 1000 in 4K machine-code routine package.

Features include upper/lower case, 64-column mode, user-defined graphics, sprites, plotting commands, windows and faster tape speeds/load. Incorporates Wilf Rigter’s WRX16 routines.

Requires 8K RAM in the 8-16K region.

STEP

Sinware **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Debugging tool that quickly pinpoints BASIC programming errors. Provides line-at-a-time execution of programs and allows for checking the display and the values of program variables for unexpected results. Other modes allow breakpoints to be set by line number for quick testing of long programs, by the number of passes for testing

loops, or by limits on specified variables. Occupies 3K at the top of 16K memory.

String

Peak **Date:** 1983 **Price:** \$2.00 **Platforms:** TS 1000
Routine to add to your programs to search for commands, words, phrases, names and phone numbers. String can help in any program where you need to recall words for correction or information. 2K.

Super Screen

Maxsoft **Date:** 1984 **Price:** \$8.00 **Platforms:** TS 1000
Window scroll routine for use in your own programs. Allows scrolling or clearing of whole or partial screen.

Super Z

Lamo-Lem **Price:** \$9.95 **Platforms:** ZX80, MicroAce
Machine code modules that add seven new statements to 4K BASIC: TAB, SCROLL, MEM, PAUSE, READ, RESTORE and DATA. Most statements are used in the form of a USR function (ie PRINT USR (MEM), which prints amount of unused memory). 1K.

SYSLD

Management Services Co. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000
Machine code utility. Write, list, insert, delete, and move machine code anywhere in memory. hexadecimal to decimal converter; routines in machine code for fast response; comprehensive documentation. 16K.

The ZX Compiler

Cinagro Software **Date:** 1982 **Price:** \$25.00 **Platforms:** TS 1000
Formerly Integer BASIC Compiler. Available on EPROM (\$30) as of July 1983.

The ZX/TS Scroll Kit

P B Thorware **Date:** 1985 **Price:** \$8.00 **Platforms:** TS 1000
Scrolling utility for BASIC programmers who want to add a professional and inter-

Software

esting look to their programs. Comes with 22 page user manual. 16K.

The ZX81 Disassembler

Martin Irons **Date:** 1983 **Price:** \$9.00 **Platforms:** TS 1000
Browse the powerful routines in ROM, check your own machine code by converting it to assembler statements. Converts 812 regular and extended opcodes to assembler mnemonics; no external tables required; jump to any point in memory at any time. 16K.

TIMACHINE

NovelSoft **Author:** Cameron Hayne **Date:** 1986 **Price:** \$19.95 **Platforms:** TS 2068
BASIC compiler for TS 2068.

Tiny Logo

International Publishing & Software Inc **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Subset of MIT Logo. Teaches children computer programming concepts. 16K.

Toolbox

Melbourne House **Author:** Ian Logan and David Webb **Date:** 1983 **Price:** \$14.95 **Platforms:** ZX81
Three utility programs. Directory displays names of programs on a tape. Record allows saving data and reading it back into the program later; can be incorporated into your own BASIC programs. Toolkit allows for better graphic effects and to write programs more quickly and efficiently; commands: NO INVERSE, INVERSE, REVERSE, FILL, FREE, RENUMBER, FIND & REPLACE, OPEN. 1K.

Toolkit

Artic Computing **Platforms:** TS 1000
Features a number of utilities for programmers. RENUMBER, DELETE, MEMORY check, DUMP (displays current values of string and numerical values, except arrays), FIND a string, REPLACE a string, SAVE (transfers program to below RAM-

TOP), APPEND (joins 2 programs), REMKILL (removes all REM statements).

Toolkit

Hewson Consultants **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Lets you execute many familiar routines with a single command. Comprehensive LINE RENUMBER including GOSUBs and GOTOs, LOAD, EDIT, and RUN machine code programs; INSPECT the ZX81 and TS 1000 system routines; COPY these routines into RAM and PATCH or EXTEND them; FIND a given piece of BASIC code and replace all occurrences of it; move blocks of BASIC lines with EDIT. Examples and instructions.

TS2068 BASIC Toolkit

Knighted Computers **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068
Written in machine language expressly for those programming in BASIC on the TS 2068, the tool provides 5 useful functions:

Renumbers a program beginning at any line number, using any initial line number, in any step up to 9999. Renumbers explicit line references of: GOTO, GOSUB, LIST, LLIST, RUN, RESTORE, and SAVE "...." LINE. Also works with VAL references, e.g., GOTO VAL "1500". Lists lines containing undefined line numbers (such as GOTO a*100). Lists current values of all BASIC variables; numeric and string variables, numeric and string arrays and loop control variables. Finds any string of characters and lists every line containing that string. Replaces any string, in every line in which it 1s found, by any other string. Deletes all lines beginning with REM. Helps conserve memory and load time for operating versions of your programs.

Turtlart

Golden Stair, The **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Uses one letter commands: direct the turtle to draw just about any figure desired.

Software

Sequences of up to 255 steps can be programmed. 16K.

Ultraviolet

ACS Software **Date:** 1983 **Price:** \$15.00 **Platforms:** ZX Spectrum
Z80 assembler. All Z80 instructions correctly assembled. Supports EQU, ORG, DEFB, DEFW, DEFS, etc. Code can be assembled and then relocated.

uSS Pilot

Microsystems Specialists, Inc. **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000
Excellent introductory language for children and beginners since it is easier to use than BASIC. Features one-character commands and a line editor. Includes tutorial and sample programs.

Utilities Tape 3

Soft-Way **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Manipulate assembly language programs in decimal or hexadecimal code. Store assembly programs in protected memory safe from the NEW, LOAD, SAVE and CLEAR. 16K.

Window Print

Zebra Systems, Inc. **Model:** WP01 **Author:** John Bell **Date:** 1987 **Price:** \$19.95 **Platforms:** TS 2068
Machine code program that gives windowing support for TS 2068. Includes version for use with OS-64 cartridge.

XFORTH

Hawg Wild Software **Price:** \$25.00 **Platforms:** TS 1000
Forth-79 standard sub-set plus extra utilities. 10K+ available for user code.

Z-80 Software Notebook

Z-Ware **Date:** 1982 **Price:** \$7.95 **Platforms:** TS 1000
More than 25 useful techniques, utilities and programs. Sorting, timing loops, searches, block transfers and more. Com-

plete Z80 instruction set fully explained and listed.

Z-99 Compiler

KOPAK Creations, Inc. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Automatically translates a large subset of BASIC into machine code which is then stored in a REM statement for use as a subroutine in any program you write. It operates on 35 of the most valuable Sinclair BASIC commands including PRINT, IF THEN, GOTO, POKE, GOTO, GOSUB, FOR LOOPS etc. 16K.

Z-AID

International Publishing & Software Inc **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
VERIFY confirms whether a program has been recorded properly on tape. The program in memory is unaffected, and a further "save" can be made if necessary. MLOAD/MSAVE enables a specified block of memory to be saved. VPTR can be used within a BASIC program to eliminate many tedious POKES and PEEKS in finding the addresses where variable values are stored. CHAIN allows the second part of a BASIC program to be loaded and tacked onto the end of the first part.

Z-TOOLS

Sinware **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
BASIC utilities that enhance programming power. MERGE programs from your own library of tested subroutines to build new programs quickly. RENUM provides neat listings, includes numbered GOTOS and GOSUBs, and flags those with expressions. COPY and DELETE blocks of lines for quick restructuring. VERIFY the contents of your tape against memory and eliminate losses to defective recording. 16K.

Z80 Disassembler

ZX81 Programs **Date:** 1982 **Price:** \$7.95 **Platforms:** TS 1000
Written in BASIC for easy modification.

Z80DA

Biocal Software **Date:** 1984 **Price:** \$10.00 **Platforms:** TS 1000
Disassembler and machine code monitor with CAI/ESF and CAI/P40 options.

Zeal Disassembler

J. C. Kilday Associates **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 2068
Uses machine code routines for fast listings to screen or printer decimal addresses. Zilog mnemonics, labeling of system variables, DEFB/DEFW modes, disassembly relocating, bank-switched ROM access. Also produces cross-reference listings of direct jumps and calls revealing major entry points and sub routines. A quality tool for debugging/documenting own code or studying TS 2068 ROM.

ZEBU: Zunk's Extra Basic Utilities

Zunk Custom Electronics **Date:** 1989 **Price:** \$20.00 **Platforms:** TS 2068
Adds 38 utilities, functions and commands to 2068 BASIC. Runs in any bank.

In edit line mode ZEBU gives up/down arrow keys, truncate edit line to the left or right of the cursor, delete all between colons at cursor, fast delete key corrects Timex bug.

In the immediate or run mode, ZEBU will join BASIC lines, block move memory with bank switching available, double poke, double peek, assign a BASIC variable with a 16 bit peek, true 16 bit AND/OR/XOR operations, 16 bit decimal to binary bit pattern, get critical program data and parameters, get BASIC program length, print five sizes of text, character modifiers make 27 combinations of character sets, list a line or range of lines, search BASIC lines, electric ink auto rotates ink colors at selected areas, hex to decimal, decimal to hex, and more.

Software

Zeus Assembler

Softsync, Inc. **Author:** Neil Motterhead and Simon Brattel **Date:** 1983 **Price:** \$19.99 **Platforms:** TS 2068
Use the full Z80 mnemonics instruction set. Editor allows cursor movement in 4 directions, insert, delete, clear line and screen. Display current registers and alter them. Save machine code by entering one letter commands; substitute lines of code. Move blocks around in memory. Mini monitor accesses memory. Automatic line numbering and renumbering. Adapted from the original by Crystal Computing for the ZX Spectrum.

ZIP BASIC Compiler

Knighted Computers **Author:** Simon Goodwin and Jon Smith **Date:** 1985 **Price:** \$16.50 **Platforms:** TS 2068
An optimizing BASIC compiler for the TS 2068 computer.

ZX Assembler

Artic Computing **Price:** \$14.95 **Platforms:** TS 1000
Machine code program occupies 7K of memory and locates itself at the top of memory. The program is a full Editor/Assembler and Monitor. Labels may be used instead of any string. The features include Line Insertion/Delete, Insert Characters, Auto Repeat on all keys. The monitor has facilities to inspect memory, registers and run machine code programs.

ZX Bug

Artic Computing **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Machine code monitor and disassembler. ZXBUG is a powerful tool for machine language programming. It is 4K long and uses memory from 71E0h to the top memory. ZX BUG works in hexadecimal (base 16), not decimal, so all addresses are a maximum of 4 hex bits long. Provides a total of 28 commands. 16K.

Software

ZX Compiler

Data-assette **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000

Convert BASIC programs to machine language. Increases execution speed. 16K.

ZX-FORTH

Artic Computing **Date:** 1982 **Price:** \$29.95 **Platforms:** TS 1000

Full implementation of FORTH for the ZX81/TS 1000. Runs up to 10 times faster than BASIC.

ZX-FORTH complies with the FORTH-79 standard, with the exceptions of replacing the # sign with the British pound symbol, the @ sign with a question mark, the exclamation point with *, an apostrophe with the word “tick”, and “[” and “]” with “(” and “)”. FORTH is unique in its ability to allow the programmer to build program solving modules then assign them user—defined names.

FORTH uses a stack for math, with a last-on/first-off structure, similar to Reverse Polish notation. All arithmetic is integer and may use single or double precision and is faster than ZX/TS BASIC.

Conditional branching is supported and tests usually change the top number on the stack as a flag. ZX-FORTH supports ELSE for second level conditional execution.

User can exit to BASIC and return to ZX-FORTH through a USR call. ZX-FORTH retains all variables, constants, operators and the dictionary.

Though written for cassette storage, ZX-FORTH can be patched to support disks with routines less than 40 bytes long. Cassette load/save is faster than Sinclair BASIC.

ZX-FORTH comes with a 64 page manual that include a bibliography of FORTH references. It has 6K of workspace when used with a 16K RAM pack. The size of the

workspace can be increased with more memory.

ZX80 1K Disassembler

Lamo-Lem **Date:** 1982 **Price:** \$9.95 **Platforms:** ZX80

Translates each Z80 machine code instruction into a unique key. Look up the key in the disassembler manual to find the assembly language mnemonic. Translates the 4K ROM, or program segments stored in a 75 byte section of memory. Includes memory test.

ZX80 Multiple Line Statements

Tim Humphries **Price:** \$2.50 **Platforms:** ZX80

Easy, useful programming trick. Saves memory, runs faster. 1K.

ZX81 1K Disassembler

Lamo-Lem **Date:** 1982 **Price:** \$9.95 **Platforms:** ZX81, TS 1000

Translates each Z80 machine code instruction into a unique key. Look up the key in the disassembler manual to find the assembly language mnemonic.

ZX81 Assembler and Disassembler

Cinagro Software **Author:** Bob Berch **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000, TS 1500

Two-pass assembler that supports symbolic expressions.

Initially available separately. Available on EPROM.

ZX81 CESIL Compiler

P. Nethercot & R. Rackstraw **Date:** 1983 **Platforms:** TS 1000

Run CESIL on your ZX81. Up to 40 CESIL lines per program. Facility for modify, list, printout listing, etc. Menu driven. 16K.

Software

ZX81 Window

Ken Osborne **Date:** 1983 **Price:** \$8.00 **Platforms:** ZX81

Define any number of “windows” on screen. Scroll characters against any background or roll off one side of screen onto the other (wraparound effect including top to bottom). Machine language routine makes things “fly” around the screen when called from BASIC. 1K.

ZXAD Assembler/Debugger

Scientific Software **Price:** \$18.95 **Platforms:** TS 1000

Two-pass assembler. Using ZILOG mnemonics with labels and symbols, 8 pseudo-ops (ORG, DEFB, DEFW, DEFS, DEFC, EQU, END), syntax checking, display or print listing with commands. Debugger includes examine/modifying, breakpoint with registers display, line renumbering occupies 7K. Comprehensive multipage manual. 16K.

ZXAS

Bug-Byte Software **Model:** 1981 **Price:** \$9.95 **Platforms:** ZX80, TS 1000

Learn and program in machine code the easy way with this powerful Z80 assembler, commissioned specially for the ZX81 & ZX80. Standard Z80 mnemonics are simply written into REM statements within your BASIC program. The assembly listings, together with addresses and assembled codes are displayed on the screen when assembled. The assembled code is executed with the USR function. The program uses 5K of memory and is protected from overwriting. Full documentation, including examples, is supplied with the cassette. 16K.

ZXDB

Bug-Byte Software **Date:** 1981 **Price:** \$9.95 **Platforms:** ZX80, TS 1000

The perfect complement to ZXAS assembler, ZXDB is a complete combined machine code disassembler and debugging program. May be used in conjunction with your own program. Additional features include Single Step, Block, Search, Transfer

and Fill, Hex Loader, Register Display and more. Executed by single keyboard entry. The combination of ZXAS/ZXDB plus one of our books will teach you all you need to know to program in machine codes.

ZXDIS Disassembler

Scientific Software **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Examine MC programs as standard Z80 mnemonics. Display mnemonics or hexadecimal data and equivalent characters. 16K.

ZXM-1

Small System Software **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000

Machine language monitor. Direct access to all memory locations and input/output ports. Examine BASIC ROM, test RAM, enter and execute machine language programs. Symbolic dump disassembles object code in memory and displays it as standard mnemonics. 16K.

ZXPRESS

Non-Trivial Solutions **Date:** 1982 **Price:** \$29.95 **Platforms:** TS 1000

Integer BASIC compiler. 208 regular variables, 26 dimensioned variables. Compiled code can be stored in REM or 2000h-3FFFh segment. Source code can be relocated anywhere; position of compile code can be selected, allowing for longer programs compiled in pieces.

ZXTK

Bug-Byte Software **Price:** \$14.00 **Platforms:** TS 1000

Toolkit adding 10 commands including: FULL RENUMBERING, MERGE PROGRAMS, READ FILE NAMES FROM TAPE, and more. 16K.



Sound and Speech Software

Sinclair owners developed innovative and resourceful programs to overcome this shortcoming of their computers and took full advantage of the sound generator in the TS 2068..

Audio Spectrum Analyzer

Ron LeMon **Model:** ASA **Date:** 1983
Price: \$14.95 **Platforms:** TS 1000
Fast, oscilloscope display. 2K.

AUDISY

Ron LeMon **Date:** 1983 **Price:** \$14.95
Platforms: TS 1000
Audio digitizers/synthesizer. Voice or music. 16K.

Beep Routine

JRC Software **Date:** 1983 **Price:** \$1.00
Platforms: ZX81, TS 1000
Produces tones over wide range of frequencies. Attach earphone through tape recorder to hear sound. USR function and 2 to 4 POKEs specify frequency and duration. Routine can be customized to location other than 16514. 1K.

Chord Finder

Rave Research **Date:** 1983 **Price:** \$5.95 **Platforms:** TS 1000
Input your notes, computer will name chords with those notes. 16K.

Composer

Personal Software Services **Date:** 1983
Price: \$19.95 **Platforms:** TS 1000
Write your own tunes in standard notation. You specify tempo, rhythm, note duration and pitch (within a range of six octaves). The computer plays it back through the TV speaker, an AM radio, or your cassette recorder. 16K.

DEFMAG

Ron LeMon **Date:** 1983 **Price:** \$14.95
Platforms: TS 1000
Digitally encoded FM audio generator. 2K and 16K.

Micro-Music

Data-assette **Date:** 1982 **Price:** \$8.50
Platforms: TS 1000
Convert your keyboard into an organ. 43 tones (3 1/2 octaves); listen via headphones or cassette player. 16-32K.

MUSIC

George R. Cartron **Date:** 1984 **Price:** \$3.00 **Platforms:** TS 1000
Add music to any program in only ten minutes. Compose up to 25 different songs and play them anywhere in your program.

Music Anth

Pegasus Micro Systems **Date:** 1983
Price: \$14.95 **Platforms:** TS 2000, TS 2068

Music Box

Thomson Software **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 1000
Stores notes into strings for each tune. Adjustable tempo; playback tunes in any order; keeps menu of tune names; enter notes from table provided. Comes with 5 preprogrammed tunes.

Music Composer Program

William Stewart Systems **Date:** 1983
Price: \$19.50 **Platforms:** TS 1000
Helps write and save music programs. May be used with or without William Stewart Music Synthesizer and I/O Port.

Music Editing Program

Ronald Rissel **Platforms:** TS 2068

Music Machine

Horizon Simulations **Date:** 1983 **Price:** \$5.00 **Platforms:** ZX81, TS 1000
Machine language will play music through your television or tape recorder. Play music by pressing the notes on the keyboard. 1K.

Music Master

Rheesware **Date:** 1984 **Price:** \$19.95
Platforms: TS 2068

Music Program

Prism Microproducts **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Compose music on the TS 1000. Play through speaker. 16K.

Software

Music Tape

Rave Research **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Four programs. One turns the Sinclair into a 2 octave musical instrument; sound comes from TV or from mic jack. Musical Squares: 12 tone calculator. Chord Finder. Mini-invaders game. 2K.

Music Theory Workbook

Nicholas Scarim **Date:** 1983 **Price:** \$495.00 **Platforms:** TS 1000
Complete music theory workbook on 16 cassettes. Includes: treble, bass, and alto clefs; scales, keys, chords, meters, rhythm; piano, guitar, recorder drills. This package is for music teachers, schools, community art centers. 16K.

Music Theory/Ear Training

Evansoft **Date:** 1983 **Price:** \$5.95 **Platforms:** TS 1000
Elementary music theory and ear training programs. Drill and practice, some tutorial, presented as games. Text, graphics, and sound generation are used in separate programs on note recognition, intervals, melodic dictation, etc. 2K and 16K.

Music/Sounds on the Radio

Florida Creations **Date:** 1983 **Price:** \$5.00 **Platforms:** ZX81, TS 1000
Technical article describes how to broadcast sounds and music to a nearby radio using the natural radio interference generated by the Sinclair. No hardware modifications are required. Sample song and weird sounds listings included. 1K.

Musical Scales

Rave Research **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Prints out the notes in any one of 8 scales on any key. 16K program also prints diagrams for guitar, bass guitar, and keyboards showing where each note is to be played and identifies the tonal notes. 2K and 16K.

Musician Royal

Electret Scientific Company **Author:** Oleg Jefimenko **Date:** 1986 **Price:** \$20.00 **Platforms:** TS 2068
Music transcription/performance program. Uses the BEEP command, so only one voice is available. Holds up to 2000 notes total in eight compositions.

Musicola

Canaan Software **Author:** T. A. David **Date:** 1983 **Platforms:** TS 2068
Software to compose, edit, harmonize, add chords, printout, and memorize several thousand notes.

Noteworthy

21st Century Electronics **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068
Compose music or create sound effects and use your creations in your own programs.

Orchestra

Ventamatic Micro Informatics **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Play your favorite melodies without add-ons. Stores up to 3000 note melodies on tape. Full editing capabilities. Allows sound over 3 octaves, with semitones and rests. Sounds through the TV speaker or MIC output. 16K.

Player ZX80/Space MUSE-AK

William Don Maples **Date:** 1981 **Price:** \$6.95 **Platforms:** ZX80
Player ZX80 will play up to 127 notes across two octaves at any tempo. Space MUSE-AK plays random sounds. 1K.

Player ZX81

William Don Maples **Date:** 1981 **Price:** \$6.95 **Platforms:** ZX81, TS 1000
2 octaves, 127 note length, any tempo. Songs repeat. Random sounds also. Also sold as "MUSIC!" 1K.

Random MUSIC!

EZRA GROUP II **Date:** 1982 **Price:** \$2.00 **Platforms:** ZX81, TS 1000
Plays random music through your television's speaker. Listing, 1K.

Speech Synthesizer (1000/1500)

Tad Painter **Model:** SS00 **Date:** 1984 **Price:** \$16.95 **Platforms:** TS 1000, TS 1500
Scaled down version of speech synthesizer for TS 2068. Consists of same vocabularies with less programmability. Uses a fast machine language program. Sound is heard through TV speaker or through an external amplifier plugged into the MIC jack. Includes eleven programs, two demonstration and nine libraries. Each library contains twenty to thirty words. No additional hardware or software required.

Speech Synthesizer (2068)

Tad Painter **Model:** SS68 **Date:** 1984 **Price:** \$16.95 **Platforms:** TS 2068
Machine language program, multiple vocabularies, flexible memory requirements, very intelligible. Nine programs include 273 high quality digitized words in variable length cells. Words can be played back in any order under program control. Each library contains seventy to eighty words or phrases. Sound is heard through the TS 2068's internal speaker and is available at the MIC jack. Requires no additional hardware or software to operate. Reproduces up to 65,536 words and phrases.

Synthi Soft

Rave Research **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Program for a polyphonic music system. Requires musical synthesizer and additional hardware. Unlimited expansion possible. Uses the computer's keys as a synthesizer keyboard. 2K.

Software

Talking Alarm Clock for TS2068

Tad Painter **Model:** TA68 **Date:** 1984 **Platforms:** TS 2068
Full function alarm clock announces time at selectable intervals. The alarm will BEEP and announce the time for two minutes or until turned off. The screen is set up with both analog (hands) and digital displays for high visibility. Perfect for when your computer is just sitting around between uses. No additional software or hardware required.

Talking TS1000

Thomson Software **Author:** Paul Thomson **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 1000
Pronounces hex numbers of memory from any address. Allows checking machine code or data without looking at screen; heard through TV speaker or tape port; resides at top of memory. Record voice or sounds into computer memory: record and play back at different speeds.

Text to Speech

Research in Speech Technology (R.I.S.T.) Inc. **Date:** 1983 **Price:** \$24.95 **Platforms:** TS 1000
Type any word and have your computer speak it. Requires the R.I.S.T. Parrot Speech Synthesizer.

The Fantastic Music Machine and Light Show

Simulusion **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Two special effects programs. Music Composer: Transforms the keyboard into a 3-octave musical instrument that plays music through your TV as you press the keys. Stores, edits, and plays back 400 notes (7000 with 16K RAM); has tone, tempo, and special effects keys. Light Show: Animates a kaleidoscope pattern that races outward from the center of the screen. 16K.

Software

Virtuoso

William Don Maples **Date:** 1982 **Price:** \$6.95 **Platforms:** TS 1000

Music synthesis program. 10 octave range, whole to 32nd and dotted notes and rests. Self performs songs at any tempo; SAVE for later use. Hear through TV, amplifier, AM radio, or record. Instructions include coding from written music for non-musicians. Length expanded to 1 50 notes. Songs may be saved for future use. Also available on ROM from ROMPAK. 2K.

Voxcomp

Syber, Inc. **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000

Computer generated speech with resident vocabulary and complete set of allophones to create unlimited phrases and sentences. Useful for integration into your own programs or for recording computer generated messages for an automatic phone answering system. 16K.

ZTalker 1.2 Text-to-Speech Software

Zebra Systems, Inc. **Model:** C146 **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 1000, TS 2068

Unlimited vocabulary including: words, letters, symbols and numbers. Talking is as simple as typing "TESTING 1 2 3". Requires 16K RAM.

Software

	F=FORMULA	L=DATA	C=CALCULATE
	01	02	03
A			
B			
C			
D			
E			
F			
G			
H			
I			

Spreadsheets

Sinclair owners were no different from any other computer owners in their desire to use their computers to solve complicated math and accounting problems. While they did not have VisiCalc, the did have many derivative options.

Compusheet

ZX81 Programs **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
Electronic spreadsheet program. Enter data or formulas in a row and column format. Formulas include all numeric functions plus special ones for adding up a series of numbers or for looking up tables. 16K.

DO-CALC

Timensa Software **Date:** 1984 **Price:** \$16.00 **Platforms:** TS 1000, TS 2068

Easy Calc

Simulusion **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Does math directly. Enter a problem or formula and the answer appears. Ten on-screen variables, A to Y, for problems like (4*D)/Tan A. Each can be an equation itself; run systems equations with a single keystroke. Various configurations included such as a printer-calculator which produces columnar output on the printer with subtotals and totals. 16K.

Economical Accounting Spreadsheet Program

Hensley & Associates **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000
Multi-calculation and “what-if?” tool. Generate reports, charts, forecasts, schedules, projections, and analyses. User can completely design own spreadsheets by editing program code. 16K.

Matrix Planner

Mindware, Inc. **Date:** 1982 **Price:** \$39.95 **Platforms:** TS 1000
All purpose worksheet for budgeting, job costing, data analysis, business planning, estimating, engineering, and home use. Sets up rows and columns of inter-related numbers, formulas, and words, “what if” questions (e.g., price revisions, lowered tax rates) can be instantly calculated to reflect changes on all variables.16K.

Mega-Calc

Datacon Corporation **Date:** 1983 **Price:** \$24.50 **Platforms:** TS 1000
Electronic spreadsheet. Adjustable column widths, more than 8 digits per column. Can read and summarize a series of other spreadsheets from cassette tape. Approximately 60 rows x 60 columns with 64K.

Memocalc

Memotech **Price:** \$49.95 **Platforms:** TS 1000
Spreadsheet analysis to assist with reports and financial forecasts. Performs complex number crunching routines with ease. Tables up to 7000 numbers, 250 rows or 99 columns with 64K. Calculate command reevaluates and displays the information.

Omnicalc 2

Knighted Computers **Price:** \$19.50 **Platforms:** TS 2068
Spreadsheet designed to make full use of the TS 2068. Up to 99 columns or 250 rows. All math functions supported. Conditional expressions allow for tax, differential interest rates and variable overheads can be easily accommodated.

Converted from Spectrum version.

OmniDisk

Chia-Chi Chao **Price:** \$9.00 **Platforms:** TS 2068
This program converts Omnicalc II (version 64000) to operate on disk. Supports both tape and disk save/load.

Screen-Calc

Banta Software **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000, TS 2068
Electronic spreadsheet. 1008 cells, each can hold an 8 letter label and a number. The 180 functions, up to 80 characters in length, permit all arithmetic, trigonometric and any other operations in the TS; loops; conditional statements; one step summing and averaging; replace functions at will; FIND and JUMP commands provide quick movement. Menu driven.

Software

Screen-Solv

Banta Software **Date:** 1984 **Price:** \$35.00 **Platforms:** TS 2068

Electronic worksheet for engineers and scientists, capable of solving algebraic or trigonometric equations and definite integrals. Allows up to 48 user defined variables and six 96 element arrays, incorporation of final formulae into BASIC programs, and 288 step SCREEN-SOLV programs. Results can be tabulated or plotted.

T/S-Calc 2000

A.F.R. Software **Author:** Albert Rodriguez **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 2068

Spreadsheet program. Maximum of 3360 characters across 15 columns and 30 rows.

Video Calc

P & B Software **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000

Electronic spreadsheet with scientific, home, and business calculations. Has all Sinclair BASIC math functions. 16K.

VU-CALC

Sinclair Research Ltd. **Model:** 03-1000 **Author:** Psion **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000

Construct and generate, calculate large tables for budget sheets, financial analysis, and projections. 16K.

VU-CALC

Timex Computer Corporation **Model:** 06-1000 **Author:** Psion **Date:** 1983 **Price:** \$24.05 **Platforms:** TS 2068

Spread-sheet approach to fiscal analysis, engineering calculations, statistical analysis and more. Formula approach locates and calculates complex tables of numbers and letters.

VU-CALC (cart)

Timex Computer Corporation **Model:** 07-1000 **Author:** Psion **Price:** \$34.95 **Platforms:** TS 2068

Never released. Spread-sheet approach to fiscal analysis, engineering calcu-

lations, statistical analysis and more. Formula approach locates and calculates complex tables of numbers and letters.

ZX-Calc

Software Applications **Date:** 1982 **Price:** \$16.00 **Platforms:** TS 1000

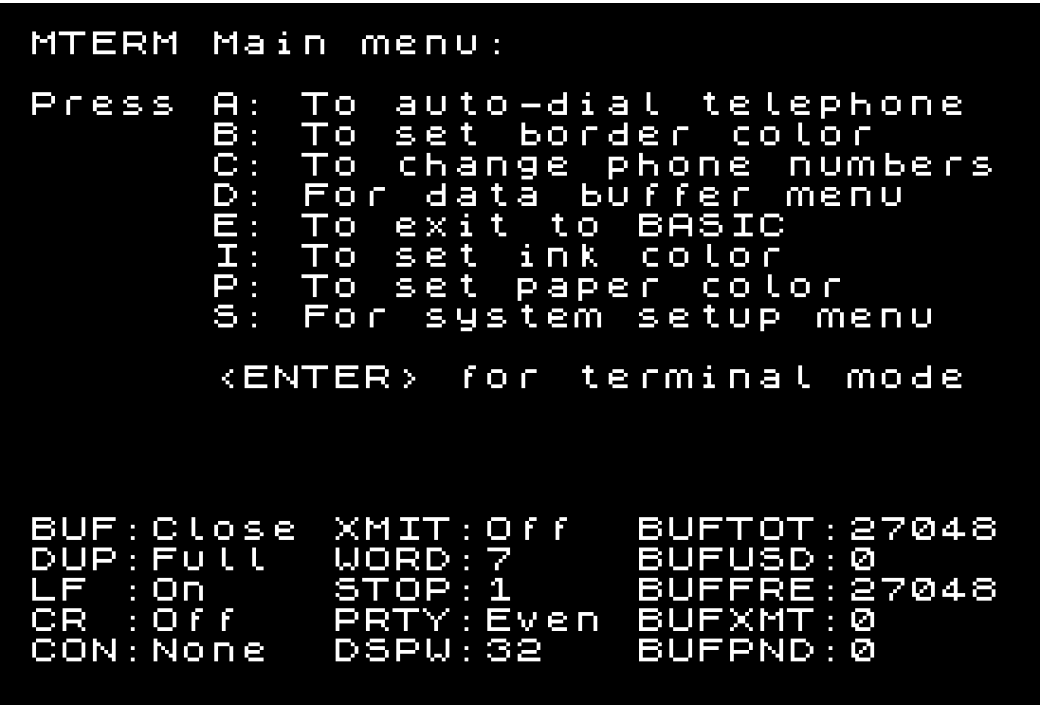
Spreadsheet with 27 columns and 40 rows. 16K.

ZX-CALC

A.F.R. Software **Date:** 1984 **Price:** \$19.95 **Platforms:** ZX81, TS 1000, TS 1500

Spreadsheet with 15 columns and 30 rows, 8 characters per cell. All 14 ZX81/TS 1000 math functions supported. Maximum of 3360 characters/spreadsheet.

Software



Terminal Programs and Bulletin Board Systems

Coupled with a modem, Sinclair owners were able to get online and use mainframe computer systems, university resources, bulletin boards and other online resources. Owners with enough resources (especially an extra phone line) could put their own computer online as a bulletin board system.

ASCOM

Data-assette **Date:** 1982 **Price:** \$24.95 **Platforms:** ZX81, TS 1000

Terminal software, for use with data-as-
sette's ZX-98 interface board. 1K.

Casboard 2068

Kurt A. Casby **Date:** 1986 **Platforms:**
TS 2068

Bulletin board system for the TS 2068.
Came in versions for tape, A & J Micro
Drive, and disk drives. Supported message
bases and file upload/download.

EZ-Mail

Nanosecond Computer Services **Date:**
1983 **Price:** \$19.95 **Platforms:** TS
1000

Software to use USPS's E-Com (Elec-
tronic Computer Originated First Class
Mail) service. 64K.

I.S.T.U.G. TS2068 BBS

Author: Paul Holmgren; Indiana Sin-
clair Timex User Group **Date:** 1987
Price: \$16.00 **Platforms:** TS 2068

Bulletin board system for the unex-
panded TS 2068. Works with TS 2050 mo-
dem and TS 2040 printer. Holds 40 535-
character messages; has "chat with sysop"
feature.

Loader V

Ed Grey Enterprises **Date:** 1986 **Price:**
\$12.95 **Platforms:** TS 2068

For use with MTERM II. Includes Xmo-
dem, auto-repeating dialer, extra 20 num-
bers, more.

MAXCOM

LARKEN Electronics **Date:** 1989 **Price:**
\$24.95 **Platforms:** TS 2068

Full-featured modem software that links
the modem to the disk, allowing uploads or
downloads of files larger than 100K. Send
NMI saves and large text files as well as
BASIC or code files, which other modem
programs couldn't send because of mem-
ory limitations. Also files can be sent with or
without a information header (Spec-term
compatible).

It has a 64 column display and is the
only 2068 modem program that will run at
full 1200 baud without missing characters.
Other features of the terminal mode are
IBM graphic characters, auto-dialer, macro
keys. 110K disk buffer for captured text,
auto repeat keys.

The BBS is the most elaborate avail-
able for the 2068 and allows the remote
user full access to the disk drives similar to
a CP/M BBS. Features of the BBS are:

- 300/1200 baud operation with fast re-
sponse even at 1200 baud
- Passwords
- Priority levels
- Use time limits
- Multiple Message Bases
- Uploads and Downloads are not limited
by memory.
- Dual Window Monitor screen.
- Interrupt driven time out and Hangup
protection.

Also keeps a user log of caller's names
and activity on disk so a printer isn't needed
and its easily customized and expanded.
MAXCOM can be used with the 2050 mo-
dem or with the Z-SIO RS232 interface and
a 300/1200 baud modem.

Mega-Mail

Datacon Corporation **Date:** 1983 **Price:**
\$18.50 **Platforms:** TS 1000

Use this program in conjunction with a
modem and you can process electronic
mail Send and receive letters over the
phone with your computer. 16-64K.

Micro BBS-1

Gordon Young **Date:** 1985 **Price:**
\$35.00 **Platforms:** TS 1000

For use with Byte Back modem and TS
1000 with 16K RAM; stores 20 messages
and sysop note.

Software

Mini XMOD

Weymil Corporation **Date:** 1986 **Price:** \$20.00 **Platforms:** TS 1000
Download/upload files via Xmodem with Westridge or Byte-Back modem. 16-64K.

MTERM II

Micro-Systems Software, Inc. **Model:** ST02 **Date:** 1986 **Price:** \$29.95 **Platforms:** TS 2068
Terminal program that improved on MTERM.

- 14 number auto dial directory.
- 27k send/receive buffer which can be erased, viewed, printed, or transmitted.
- 10 macro keys which hold up to 53 characters each for auto logon, codes, etc.
- Transmit and receive BASIC programs and text from a BBS or another TS 2068.

MTERM II Cartridge

Zebra Systems, Inc. **Model:** ST2C **Date:** 1986 **Price:** \$34.95 **Platforms:** TS 2068
Terminal program with 14 number auto dial director, 27K send/receive buffer, 10 macro keys, etc. On cartridge.

MTERM/T

Zebra Systems, Inc. **Model:** ST01 **Date:** 1986 **Price:** \$12.95 **Platforms:** TS 1000, TS 2068
Smart terminal program. Previously known as MTERM I.

Smart Terminal 1

Timex Computer Corporation **Model:** 06-2012 **Date:** 1983 **Platforms:** TS 1000, TS 2068
Terminal program supplied with TS 2050 modem. Side A is for the TS 1000/TS 1500 and Side B is for the TS 2068.

Specterm-64

Ed Grey Enterprises **Price:** \$25.00 **Platforms:** TS 2068
300/1200 baud terminal program for the 2068. Adapted from the Spectrum program to run natively on the TS 2068.

64 column display without additional hardware, 31K buffer area. 7K free BASIC space for adding loaders, menus, dialers and adapting to different mass storage systems. Supports XMODEM.

tBuff telecom

Curry Computer **Price:** \$9.95 **Platforms:** TS 2068

XLATE

Kurt A. Casby **Date:** 1988 **Platforms:** TS 2068
Public domain software; translates between all TS 2068 terminal programs.

Z-Term 64

Zebra Systems, Inc. **Model:** C278 **Date:** 1986 **Price:** \$29.95 **Platforms:** TS 2068
Terminal program for use with OS-64.

ZX-TERM * 80

Silicon Mountain Computers **Date:** 1986 **Price:** \$25.00 **Platforms:** TS 1000
Terminal program that offers 40, 60 and 80-column mode on the ZX81/TS 1000. Supports data transfers, full ASCII support, printer support and more. Requires M1 NOT adapter. 32K or more RAM recommended. Also available on EPROM for use with the IF/Firmware Card.

Software



Utilities

The Sinclair computers could only pack so much power into their ROMs. This created opportunities for enterprising and imaginative programmers to develop utilities, small toolkit programs, that would fill in for those missing features.

16K MultiProgram

ZX Users Group of New York **Date:** 1984 **Price:** \$10.95 **Platforms:** TS 1000

Explore the mechanics of your computer; block transfer operation; gain advanced programming skills; store up to 10 multiple programs; four games; learn how machine code works.

25 Machine Code Programs

Inter-Pacific Systems Inc. **Date:** 1984 **Price:** \$6.00 **Platforms:** TS 1000

Assortment of programs from games to utility programs for using ZX/TS graphics better.

AERCO CP68 Printer Driver

Jack Dohany **Platforms:** TS 2068

Customizable printer driver for parallel (Centronics) printers. While it was written for the CP-68 parallel printer interface, it does work with other parallel printer interfaces.

Back Up Copies

Katt's Computers **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000

Make back up copies of programs. Machine code loading routine will stop any program after loading enabling the use of the SAVE command.

Base Conversion

PleasantTrees Programming **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000

Base conversion tool for machine language programmers. Converts numbers between binary, octal, and hex; accepts any base up to base 16 and returns its base 10 equivalent or vice versa; whole or fractional numbers; detailed instructions. 16K.

Base Conversion

Maracomp **Date:** 1982 **Price:** \$5.00 **Platforms:** TS 1000

Machine language aid. 16K.

Base-N

Biocal Software **Date:** 1983 **Platforms:** TS 1000

Convert numbers from one base to another quickly; up to base 36. Includes decimal fractions.

Best of Business and Utilities

Byte Power **Date:** 1988 **Price:** \$19.00 **Platforms:** TS 2068

Contents

JST Enterprises **Date:** 1983 **Price:** \$1.25 **Platforms:** TS 1000
2K listing.

Copy-Cass

R-Tek **Date:** 1983 **Price:** \$19.95 **Platforms:** ZX80, TS 1000

Software backup system interfaces two inexpensive cassette recorders to provide a reliable method of tape to tape transfer of any program compatible with ZX80, ZX81, and TS 1000 computers.

COPY*

SiriusWare **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000

Copy standard and protected tapes.

Data Base Conversion

UAS **Date:** 1983 **Price:** \$3.95 **Platforms:** TS 1000

Enter a number in any of the following bases: decimal, binary, octal, hexadecimal. Get the equivalent in the other bases. 16K.

Day finder, Sequence guess, Scetcher

Artic Computing **Model:** M1.01 **Price:** \$8.25 **Platforms:** ZX80

Programs for the 1K ZX80.

Directory

Logan Software **Price:** \$6.00 **Platforms:** ZX81

Read tapes and display program names. 1K.

Software

Directory/Record

Softsync, Inc. **Date:** 1982 **Price:** \$14.95 **Platforms:** ZX81
 DIRECTORY allows you to read names of programs saved on cassette. RECORD program allows you to save and load 96 byte data records on tape and can be incorporated into other programs. 1K.

Display

Biocal Software **Date:** 1983 **Platforms:** TS 1000
 Several different graphics techniques are used to create pictures and plots.

DT File

S & S Company, The **Model:** T1204/T2204 **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000, TS 2068
 Tape file: computer program organizer with data sort & print-out.

Fast Load Program

William Stewart Systems **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000
 Program to speed the “learning” of Big Ears.

Fast Save/Load Program

Musamy Software **Date:** 1983 **Price:** \$15.00 **Platforms:** TS 1000
 Up to 20 times faster (4800 baud). Full variable speed save, save any part of memory. 16K.

Fastsort

ZX81 Programs **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000
 Machine language program that sorts up to 255 floating point numbers stored in a BASIC array in 4 seconds. A comparable BASIC program takes over 16 minutes in the FAST mode. 16K.

Graph

Discount Software, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Improved Slow Pause

EZRA GROUP II **Date:** 1982 **Price:** \$1.00 **Platforms:** ZX81

Index/Contents

Wizard Works, The **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
 Index file of up to 200 programs on tape. Table of contents and selector for cassettes tapes. 16K.

Key Load

G. Russell Electronics **Date:** 1983 **Price:** \$10.00 **Platforms:** TS 1000
 Unlocks unsavable, unLISTable cassette programs. After loading this short machine language program, any TS/ZX cassette program subsequently loaded instantly becomes savable and listable. Also allows loading two programs, one after another and merge them into one program. Display number of bytes remaining in RAM for programming at any time, instantly.

Keyword

Jack Dohany **Platforms:** TS 2068
 This program allows you to enter the TIMEX BASIC keywords, one letter at a time. This is useful to those who have custom keyboards without legends. You can toggle this feature on and off with a PRINT USR statement.

Line renumberer, Stopwatch, Len(\$)

Artic Computing **Model:** U1.01 **Price:** \$10.75 **Platforms:** ZX80
 Utilities for the 1K ZX80.

LLIST-GP

HAWC Programming **Date:** 1984 **Price:** \$5.00 **Platforms:** ZX81, TS 1000

LODAB

Ultimate Blackwood, The **Date:** 1983 **Price:** \$12.00 **Platforms:** TS 1000
 Merge BASIC programs, renumber lines, and display size of each program. 16K.

Memory One

Small Digital Systems **Date:** 1985 **Price:** \$14.95 **Platforms:** TS 1000
 Utility for use with Hunter 8K RAM.

Software

Power Print

McBrine Computer Products **Date:** 1988 **Price:** \$9.95 **Platforms:** TS 2068
 The ultimate in support for your Epson-compatible printer with AERCO, Tasman or A&J parallel interface. Features: 100% correct LLISTings, accurate aspect ratio screen dumps, text-only screen dumps and more.

PRG-DLR

Troiano Software Company **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000
 Cassette program directory allows the user to catalog programs that were stored on tape. Program name can be added/changed/deleted. 2K.

Prodir

Peak **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000
 Programmed directory to organize your programs and ease loading. 16K.

Program Name Reader

JRC Software **Date:** 1983 **Price:** \$1.00 **Platforms:** ZX81, TS 1000
 Reads all names of programs on tape: prints to screen or to printer. Sees names one at a time as they are read from tape. Operates from REM statement at 16514. 1k.

Quick Load

Discount Software, Inc. **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000
 Load and save 6 times faster.

Quickload Cartridge

ROMPAK **Price:** \$34.95 **Platforms:** TS 1000, TS 1500
 Saves/loads programs fifteen times faster. Stores megabyte on one cassette.

REMC

Small Digital Systems **Date:** 1985 **Price:** \$14.95 **Platforms:** TS 1000
 Utility for use with Hunter 8K RAM.

Memosha

Syber, Inc. **Date:** 1983 **Price:** \$15.95 **Platforms:** TS 1000
 Allows the Seikosha and Radio Shack printers print the entire Sinclair character and graphics set using the Memotech Centronics interface. Includes renumbering routine. 16K.

Menu

Biocal Software **Date:** 1983 **Platforms:** TS 1000
 Tape loader program, menu driven. Add, change, delete, sort, list.

Multiple Programs in Memory

JRC Software **Date:** 1983 **Price:** \$1.00 **Platforms:** TS 1000
 Store from 2 to 47 programs, depending RAM. Allows programs to be swapped in a split second. Memory is divided into uniform sections, so programs must be roughly same size. 2K.

OS-64 Utility Tape

Zebra Systems, Inc. **Model:** C278 **Date:** 1986 **Price:** \$19.95 **Platforms:** TS 2068
 Collection of utilities for use with OS-64 cartridge. Includes:

- BIGCOPY: copy routine that provides full page (enlarged) screen COPY for Epson compatible printers
- OPTBOLD: provides an optimized bold character set for enhanced visibility on low-res video screens
- BIGCHAR: print three enlarged character modes from BASIC
- EDITOR64: 64-column screen editor subroutine for use by advanced programmers
- OLIVCOPY: system COPY for Olivetti PR2300
- FDDRS232: system printer interface driver, allows Zebra FDD users to pass LPRINT, LLIST, and COPY output through the FDD RS232 port

Software

RENLEN

Advanced Energy Systems Software Group **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000

Renumber/length utility. Automatically renumber program in any increment plus list new line numbers containing GOTO and GOSUB with necessary edits. Also shows amount of RAM required. 16K.

Self-Starting Program Un-locker

N. J. Gipson **Date:** 1983 **Price:** \$13.95 **Platforms:** TS 1000

Changes any tape program to allow BASIC commands immediately after load-ing.

SmartWatch Clock Software

Jack Dohany **Date:** 1996 **Platforms:** TS 2068

Public domain package to read a Dallas Semiconductor SmartWatch clock/calendar chip. The device installed in the 2068 under the Home ROM.

Software for Serial Input

Cosmonics **Model:** CS 22 **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000

Provides RS232 input timing and ASCII to Sinclair character translation.

Software for TTL Serial Out-put Port

Cosmonics **Model:** CS 21 **Price:** \$10.00 **Platforms:** TS 1000

Provides correct RS232 timing and translation to ASCII.

Sort 2.3

JST Enterprises **Date:** 1983 **Price:** \$2.00 **Platforms:** TS 1000

16K listing.

Stopper

Intercomputer, Inc. **Model:** PT4002 **Date:** 1983 **Price:** \$18.95 **Platforms:** TS 1000

Break through any machine code soft-ware, list on screen, save to another tape or print out.

Super Data Save

Powell Hargrave **Date:** 1983 **Price:** \$44.95 **Platforms:** TS 1000

High speed load, save and verify sys-tem. Able to load and save data separately from program. Free memory and renumber routines included. Comes with filter to im-prove signal from tape.

Super Save/Load

JRC Software **Date:** 1984 **Price:** \$4.95 **Platforms:** TS 1000

Supertools

McBrine Computer Products **Date:** 1988 **Price:** \$9.95 **Platforms:** TS 2068

Programming utilities. REMkill, header reader, renumber, variable dump, program tracer et cetera.

SYSDTA

Management Services Co. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000

Comprehensive 1K machine code input routine as on large commercial computers. Input from anywhere on the display. Easy user interface through one string variable and GOSUB. Data types entered, validated, and displayed including strings, numerics, compacted numerics, dates, and verify prompt. 16K.

Tape Corrector

Byte Power **Author:** Kristian Boisvert **Date:** 1988 **Platforms:** TS 2068

Tape Unlocker

JRC Software **Date:** 1984 **Price:** \$1.00 **Platforms:** ZX81, TS 1000

Machine code program to break into programs for listing or making backup copies. 1K.

TASPRINT

Tasman Software **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 2068

Allows you to print documents in 5 dif-ferent type-styles. Provides underline, boxed and inverse printing. All type fonts have true descenders and may be merged with TASWORD TWO or your own BASIC

programs. Requires TASMAN printer inter-face.

TASWIDE

Tasman Software **Date:** 1984 **Price:** \$14.95 **Platforms:** TS 2068

Display 64 columns on screen, print up to 64 columns wide on TS 2040 printer.

The Amazing Active Display

Macronics **Date:** 1980 **Price:** \$20.00 **Platforms:** ZX80

Machine language routine that allows a continuous display. Intended for use with user’s programs.

The Kruncher

RMG Enterprises **Author:** S&K Enter-prises **Date:** 1986 **Price:** \$9.95 **Plat-forms:** TS 1000, TS 2068

Program compression utility. Machine language program that automatically ap-plies memory saving techniques like VAL “148” and INT PI to an entire program.

The ROM Reader

ZETA Software **Price:** \$5.00 **Plat-forms:** TS 1000

Program listing.

Timescreen

HAWC Programming **Date:** 1984 **Price:** \$9.00 **Platforms:** ZX81, TS 1000

Creativity and planning aid. 3 screen formats, BASIC routines to enter and rear-range data, 10 screens in 16K; 36 with 32K. Use with any printer that will accept COPY routine.

Tourist C

WIDJUP Company **Model:** TS2SPY86B **Author:** William Pedersen **Date:** 1986 **Price:** \$32.50 **Platforms:** TS 2068

Extended bank switching disassembler. Features include offset for relative branches, database of information about the 2068 ROM, universal printer driver.

Software

Universal Printer Driver

Silicon Mountain Computers **Date:** 1988 **Price:** \$14.95 **Platforms:** TS 1000

Supports printing to via wide variety of printer interfaces and printers. 16K.

uSS Backup

Microsystems Specialists, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Allows user to make backups of pro-grams using only 1 tape recorder. Provision to make multiple backups.

Utility #1

S & S Company, The **Model:** T1201/ T2201 **Date:** 1983 **Price:** \$12.95 **Plat-forms:** TS 1000, TS 2068

Ledfor: Ledger formatting. Sort: 3 sort routines and demo.

Utility 1

Games to Learn By, Inc. **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 2068

Machine code sort, search (alpha and numeric) and renumber. Can be merged with other programs.

Utility 2

Games to Learn By, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 2068

User-defined graphics made easy. Draw UDG with a joystick, copy to printer and save to memory.

Utility 3

Games to Learn By, Inc. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 2068

User-friendly 64 column mode. Menu-driven demo.

Utility II

Peak **Date:** 1984 **Price:** \$10.00 **Plat-forms:** TS 1000

Merge (combine programs), line renum-ber, word search, block delete and inverse video.

Utility Pack 1

LINSAC **Date:** 1981 **Price:** \$10.00
Platforms: ZX80

Memory display, hex code monitor, renumber, memory search. 1K.

Variable Dump

J. B. Thomison **Date:** 1984 **Price:** \$4.95 **Platforms:** TS 1000

268-byte machine language program lists all variables and values in memory . Handles strings, arrays, token characters, numeric and E-format variables. Useful for debugging BASIC programs.

Verify

Space Breaker **Date:** 1982 **Price:** \$5.00 **Platforms:** TS 1000

Machine code program designed to verify that a saved program is reloadable. Can be embedded in important programs or used as a programming aid. 16K.

Viewtext

Gladstone Electronics **Price:** \$14.95
Platforms: ZX81

Ten page information display system. Can display both text and graphics in any sequence with variable speed. Applications include shop window displays, education, animation.

WIDJUPEEL

WIDJUP Company **Model:** T71INT-F86B **Date:** 1986 **Price:** \$14.95 **Platforms:** TS 2068

Lets you use all the features of the Gorilla Banana printer. Dump the screen to the printer in normal size or enlarged.

Winkjet 1

WIDJUP Company **Model:** T70INT-F86B **Date:** 1986 **Price:** \$14.95 **Platforms:** TS 2068

Lets you use all the features of the Olivetti PR2300 printer. Dump the screen to the printer in normal size or enlarged.

Z-XLR8

Advanced Interface Designs **Date:** 1982 **Price:** \$19.50 **Platforms:** ZX81, TS 1000

Cassette storage system that SAVES/LOADS 6-10x faster than normal, with error checking. Fast array variable and binary data save/load independent of program save/load.

Available as EPROM, mapped to 14-16K, or cassette tape, mapped to 16-18K, 25-27K, or 30-32K.

ZPRINT-80

Zebra Systems, Inc. **Model:** C270 **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068

Print grey-scale reproduction of color screen to an 80-column printer. Includes high and low memory TS 2068 and Spectrum versions.

Includes 80-column LPRINT and LLIST support. Use your 80-column printer with your own or existing applications programs. Supports a 2040-size COPY to your 80—column printer. Compatible with Zeus Assembler and Zeus Monitor/Disassembler.

Only LLIST and LPRINT 80-column printer support package that is a true functional equivalent of the 2040 printer routines contained in the Timex ROM. ZPRINT-80 is compatible with more programs than any other printer driver available for the TS 2068.

Compatible with AERCO, TASMAN (Rev B or Rev C) OLIGER and the A & J Stringy Floppy Centronics printer interfaces and the following 80—column printers:

- Epson MX-80, RX-80 and FX-80
- Star Micronics Gemini 10x and SG-10
- Memotech DMX-80
- Panasonic 1090/1091
- C-Itoh 8510 or Prowriter
- Mannesman Tally Spirit-80

ZX80/1 Record

Logan Software **Price:** \$9.00 **Platforms:** ZX80, ZX81, TS 1000

System to save, load or enter 96-byte records. 1K.

ZX81 Test

Softest **Date:** 1983 **Price:** \$10.00 **Platforms:** ZX81

Suite of test programs. Tests, displays, memory, keyboard and primary basic functions. 1K.

ZXVER

Charles Drury **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000

Self-running utility program to ensure programs SAVE and LOAD correctly. Creates a 10 byte checksum when saving and verifies the stored code upon load.

```

MScript Command Menu

A - Append a document      A [docname]
C - Change find string     C [string]
F - Find text string       F string
L - Load new document     L [docname]
R - Restart MSCRIPT        R
S - Save the document      S [docname]
T - Set tab positions      T [pos,...]
W - Window width adjust    W width

```

```
Memory used      :    45
Memory free     :  18393
Window width    :    64
Word count      :     8
Line count      :     1
Current document: NONAME
```

Enter command as shown or press BREAK to return

```
--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--  
Command ? _
```

Word Processing

Of the three core “business” uses of computers, word processing was the most accessible and easy to understand. Most computer users were already familiar with typewriters and welcomed the additional features that word processing software offered.

Even within the constraints of the ZX81 and TS 1000, programmers found ways to offer “real” word processing features, including lower case characters and line lengths greater than 32 characters.

TS 2068-based word processing software offered a full experience comparable to similar programs on other home computers.

Beaver Writer

Beaver Computer Products **Date:** 1986 **Price:** \$25.00 **Platforms:** TS 2068
80-column word processor, compatible with AERCO printer interface and EPSON printers.

Hi-Res Word Processor

Nissim Elmaleh **Date:** 1984 **Price:** \$25.00 **Platforms:** TS 1000
Lowercase on screen, full cursor movement. Prints 64 characters per line sideways on 2040 printer in upper and lower case. Also supports 80 column printers.

Letteriter/Bufferiter

Mountaineer Software **Author:** Bill Ferree **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068
Software to make better use of your Westridge 2050 modem and MTERM II terminal software with the TS 2068.

Letteriter is a 32-column Word Processor for the TS 2068 computer and a TS 2040 printer. With Letteriter you can write, edit, and save screens of information to print with your TS 2040.

Bufferiter interfaces with MTERM II and allows you to transmit files generated with Letteriter to other TS 2068 users, BBS Systems, or CompuServe. You can also save information downloaded from another TS 2068, BBS, or CompuServe to tape for editing with Letteriter.

LTEXT and ZTEXT

Oasis Software **Author:** Graham Asher **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000
Word processors. ZTEXT is upper-case only; LTEXT is upper and lower-case; lower-case is indicated with inverse characters. 16K.

Mega-Doc

Datacon Corporation **Date:** 1983 **Platforms:** TS 1000
16-16K.

Mega-Lex

Datacon Corporation **Date:** 1983 **Price:** \$23.50 **Platforms:** TS 1000
Word processor. Features tab, delete and justification of margins. Insert or delete lines, blocks of text, or entire paragraphs. Move text sections as large as a whole block of text or as small as one word. Built-in lexicon/macro can remember a graphic letter head, standard salutations or closings, addresses, etc. 16-64K..

Memotext

Memotech **Date:** 1983 **Price:** \$49.95 **Platforms:** TS 1000
Brings commercial standards of text editing to the Sinclair. Text is arranged in 32 character lines for the screen with comprehensive editing facilities. On output, the user chooses the line length required for printing and the system does the rest. When used with the Memopak Centronics interface, the word processor can print 80 character lines, upper and lower case and single and double size characters.

Memotext (RAM-based)

Memotech **Platforms:** TS 1000
Includes Powell Hargrave's Super Data Save (SDS) relocated and incorporated for fast load and saves of text. Help screens and a return to BASIC are also included. Requires memory in the 8-16 K block and the Memotech parallel interface.

MSCRIPT

Micro-Systems Software, Inc. **Date:** 1985 **Price:** \$24.95 **Platforms:** TS 2068
Machine language word processor developed exclusively for the Timex 2068 by Micro Systems Software, Inc., the authors of MTERM II (Smart Terminal II).

It is the only popular word processor that takes advantage of the Timex 2068 64 column extended screen mode for a 64x22 text display.

Other features include full control of text width and margins, page headers,

Software

page footers, page numbering, auto-centering of text, full use of your printer’s special features from within documents, automatic word wrapping, right justify, a help page upon demand, block move, block copy and delete functions, and find and replace any text string.

MScript requires an AERCO, TASMAn (Rev. B or C) or A & J Centronics printer interface and works with all Centronics compatible 80 column printers. MScript works with any B&W or color television, B&W or color composite monitor or RGB monitor. MScript includes an 90 page user’s manual, quick reference card and Program Cassette with Sample files.

Jack Dohany improved and released new versions of MScript for a number of years.

Real Word Processing

SiriusWare **Date:** 1984 **Platforms:** TS 1000
Extremely fast, full-screen word processor that uses less than 4K of RAM. Full featured, including copy, move, replace, global string search/replace. Prints to full-size printers, in upper/lower case and up to 255 characters per line.

RonsTED

Ron Ruegg **Date:** 1985 **Price:** \$5.00 **Platforms:** TS 2068
Word processing for TS 2068/TS 2040 printer owners. Offers four type fonts and provides 20 selections from the main menu. 16 page user’s manual.

rWP32

Gesso Products **Author:** Bob Orrfelt **Date:** 1985 **Price:** \$24.95 **Platforms:** TS 2068
Word processing program on dock cartridge. 1/4" high headlines, figures in text, full screen editor, extra character sets, printer format control, banners and more.

This is an AROS cartridge; it contains a BASIC program converted to run from the cartridge.

Smart Text

Gulf Micro Electronics **Date:** 1986 **Price:** \$26.00 **Platforms:** TS 2068
Three integrated software programs that do most all administrative functions: word processing, data files management, mailing list, form letters, mailing labels, repeat printing, auto letterheads. Also available in OS-64 and SDOS versions.

Smart Text ZX/TS

Gulf Micro Electronics **Date:** 1985 **Price:** \$29.95 **Platforms:** TS 1000
Word processor/database/interactive office utility program. It will work with the JLO video upgrade and an assortment of printer interfaces.

Syntext

S & S Company, The **Model:** T1301/T2301 **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000, TS 2068
Word processor.

SYSDOC

Management Services Co. **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Text editor. User defined file size; over 11,000 characters for text on 16K; edit, move, and delete text. Tabs for text alignment; continuously updated text display; comprehensive documentation. 16-64K.

T/S-Text 2000

A.F.R. Software **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068
Word processor that supports up to 650 lines of text.

TASWORD for 256K AERCO

Zunk Custom Electronics **Date:** 1988 **Price:** \$15.00 **Platforms:** TS 2068
Hold five 300-line documents (96,000 characters). For AERCO 256k four-drive mod only.

Software

Text Editor 2000

People’s Software Supply **Author:** Christopher Nystrom **Date:** 1985 **Price:** \$4.95 **Platforms:** TS 2068
Editor written in BASIC. Printed as a type-in program in T-S Horizons n13. Written to support TS 2040 printer.

Text Form

Maranatha **Date:** 1983 **Price:** \$9.95 **Platforms:** TS 1000
Use your keyboard as a typewriter. 16-64K.

Text II

Peak **Date:** 1983 **Price:** \$20.00 **Platforms:** TS 1000
Word processor with adjustable number of characters per line. Can split print out to left and right sides to permit 64 columns via TS 2040 printer.

Text Tape 2

Soft-Way **Date:** 1983 **Price:** \$10.95 **Platforms:** TS 1000
Three programs: Book, List, A-Z. Book: Edit-Tab/Transfer/Review/Print/Save, 20 pages. List: Edit/Save/ Search/Review, 2500 items. A-Z: Alpha-numeric sort with save. 16K.

Text Worker

Sourceware, Inc. **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000

Texter

BARLOG Software **Date:** 1982 **Price:** \$2.00 **Platforms:** TS 1000
Text editor allows you to store up to 400 lines of text. 16-64K.

Texter II

BARLOG Software **Author:** Bob Lucas **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 1000
Word processor compatible with TS 2040 printer and 64K RAM.

Tasword Text Conversion

Lemke Software Development **Price:** \$19.95 **Platforms:** TS 2068

Tasword Two

Tasman Software **Date:** 1983 **Price:** \$49.00 **Platforms:** TS 2068
Full featured word processor for the TS 2068.

- 64 characters per line
- 64 characters per line to Timex or Alphacom printer
- Works with AERCO or TASMAn Centronics interface for 80 column printing
- Automatic word wrap
- Right justification
- Block move and copy
- Margin settings
- Two HELP pages
- Search and replace
- Scroll and FAST scroll (up and down)

Text

Peak **Date:** 1982 **Price:** \$10.00 **Platforms:** ZX81
Program for easy text editing, storage and display. Includes “Prodir”, a programmed directory to organize your programs and ease loading.

Text + Prodir

Peak **Date:** 1982 **Price:** \$10.00 **Platforms:** TS 1000
Edit and save pages of letters, address books, etc. with Text. Recall pages without splitting words at the end of a line. Text can be used with your printer. PRODIR is a programmed directory to organize your programs and ease loading. 16K.

Text Editor

JRC Software **Date:** 1984 **Price:** \$2.00 **Platforms:** TS 1000
Screen editor: lets you handle all 128 characters plus ability to rearrange paragraphs. sentences, etc. Text formatter: left and right margin adjust, automatic paragraph indentation, adjustable line length. 32 single keystroke commands.

Software

Textman

TEJ Computer Enterprises **Date:** 1985
Price: \$24.95 **Platforms:** TS 2068
Word processor.

Textwriter 1000

Robert Fingerle **Date:** 1983 **Price:** \$11.95 **Platforms:** TS 1000
Word processor. Capabilities include insert/delete, text compression/realignment and buffer memory for saving portions of text to use elsewhere. Also includes tabulation, logically formatted display, text save, and printer control. Also available on ROM from ROMPAK. 16K.

Textwriter 2000

Robert Fingerle **Date:** 1984 **Price:** \$29.95 **Platforms:** TS 2068
Word processor for the 2068. A Plus versions supported full-size printers and a Plus 64 version added 64 column support. Sold by E. Arthur Brown as Textwriter 2068.

TV Typewriter

Wizard Works, The **Date:** 1984 **Price:** \$4.95 **Platforms:** TS 1000
Text handling program that allows on screen editing and output to printer. Up to 300 lines of text.

Typalot GB

WIDJUP Company **Model:** T51WDS-B86B **Date:** 1986 **Price:** \$18.50 **Platforms:** TS 2068
Word processing for the Gorilla Banana printer.

Typalot J1

WIDJUP Company **Model:** T51WD-SJ86B **Date:** 1986 **Price:** \$18.50 **Platforms:** TS 2068
Word processing for the Olivetti PR2300 printer.

Typalot S

WIDJUP Company **Model:** T50WD-S84B **Date:** 1984 **Price:** \$12.50 **Platforms:** TS 2068
Word processor. Prints sideways on 2040 printer for 64-column format. Max file size is 320 lines.

Type

Rheesware **Date:** 1984 **Price:** \$9.95 **Platforms:** TS 2068
Text processor.

VIEWord, MAIList, FORMail

Jim Clatfelter **Date:** 1985 **Price:** \$25.00 **Platforms:** TS 2068
Word processor, mailing label and form letter printer software. Later versions supported 64 columns with Zebra's OS-64 cartridge.

Vu-Write

SyncMaster **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000
Easily create documents like letters, document spreadsheets and other programs with full insert, delete, move, and print text. Completely menu-driven, 11K free RAM for documents. Define file size, set tabs and start writing. 16K.

Word 1.5

James Dupuy **Date:** 1985 **Platforms:** TS 2068
Word processor written entirely in BASIC.

Word Manager

English Micro Connection **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068, ZX Spectrum

Word Processing

Maranatha **Date:** 1983 **Price:** \$7.95 **Platforms:** TS 1000
Fast mode operation for speed. Write, edit, display, save or LPRINT your text. 16-64K.

Software

Word Sinc II.4

Powell Hargrave **Date:** 1983 **Price:** \$35.00 **Platforms:** TS 1000
Same as Word Sinc II.3 but produces 80 column printouts with standard parallel interface and 80 column printer. 8,000 characters with 16K, 48,000 with 64K.

Word Sinc II.5 & Wordfont

Peter McMullin **Author:** Peter McMullin, Powell Hargrave **Date:** 1985 **Price:** \$30.00 **Platforms:** TS 1000
Powerful, easy to learn and use text and graphics processing program. Features include text entry, full screen edit, text listing, searching, block move and delete and two string replacement commands. The print command allows you to preset both right and left margins and tab positions, enter the desired number of lines per page, and the number of characters allowed per line. Also included in the program is a screen dump routine that takes an exact image of the video screen and prints a hard copy of it with a suitable high resolution graphics printer.

The second half of the system is a program/data base called WORD FONT. This program is loaded and run before WORD SINC. WORD FONT allows you to store the bit images of alternate character sets in memory to be used during the print routine of WORD SINC. Included are fonts for a script font, two serif types, and two sans serif types. You may also create your own font. All fonts can be printed normal, double width, inverse, or even double-width inverse.

Word Sinc II.5 was rewritten by Peter McMullin in cooperation with Powell Hargrave.

Word Tree

Soft Magic Corp. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Word processor written in Forth, for use with Pluri-Forth.

Word Processing Trainer

S & S Company, The **Model:** T1302/T2302 **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000, TS 2068
6 commonly used routines written in BASIC to help the user understand how word processors work.

Word Processor

Custom Electronics Device Corp. **Date:** 1983 **Price:** \$18.95 **Platforms:** TS 1000
Enter text line by line or a paragraph at a time. Edit function allows editing in any way on each line. Shift a line position one space at a time, left or right, center lines. 16-64K.

Word Processor

HD Software **Date:** 1984 **Price:** \$19.95 **Platforms:** TS 2068

Word Processor

Prism Microproducts **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Use your TS 1000 to familiarize yourself with word processing.

Word Processor Program

Inter-Pacific Systems Inc. **Date:** 1984 **Platforms:** TS 1000
Upper and lower case text on the Sinclair or TS 2040 printer; programmable characters.

Word Sinc II.3

Powell Hargrave **Date:** 1984 **Price:** \$20.00 **Platforms:** TS 1000
Word processor with extended features. 42 characters per line, upper and lower case plus punctuation and 20 special characters. Full screen editing, auto repeat on all keys. 8,000 characters with 16K RAM, expandable for larger RAM packs. Requires 16k and TS 2040 or Alphacom 32 printer. 16-64K.

Word Worker

Sophia Systems **Author:** Gary Szekeres **Date:** 1984 **Price:** \$18.00 **Platforms:** TS 1000
Edit, save and print any kind of document. Designed to work with any printer. 16-64K.

Word Worker

Sourceware, Inc. **Date:** 1984 **Price:** \$18.95 **Platforms:** TS 1000
Word processor program.

Word-Master

Jack Dohany **Date:** 1990 **Platforms:** TS 2068
Word processor with graphics capabilities, and with optional graphic designer, LQ fonts and desktop publisher. Optional featured required an Epson-type dot matrix printer.

Word-Master was written for the Spectrum by Paul Sneesby and Barry Parkinson, of PCG Software in England. Jack Dohany customized, sold and supported it in the US.

Word-Master was a full-featured “extendable” word processor, written in machine code, with provision for BASIC disk access. The program used a 64-column display.

Word-Master could load many files in memory. Files may be text, graphics, fonts, extension programs, or “page layouts”.

Word-Master could load a screen and “capture” all or part of it, converting it into a “graphic file” suitable for inclusion by name in a text file. When the text file is printed, the named graphic is accessed from memory and printed. Graphics were positioned and sized via commands embedded in the text.

Extension programs added capabilities to the core word processor. Several small utilities are included in the package. Large utilities included HEADLINER (a graphics

processor) and TYPELINER (a desktop publisher). Both include a number of special fonts. TYPELINER fonts were complex proportional “printer oriented” letter quality fonts.

Dohany’s version required a Spectrum emulator and printer interface. Versions were available for tape, AERCO, LarKen, Oliger and Zebra disk systems.

Word-Most

Sharp’s **Date:** 1985 **Price:** \$19.95 **Platforms:** TS 2068
Word processor.

Word/File handling program

T-Ware **Date:** 1985 **Price:** \$10.00 **Platforms:** TS 1000
Machine code. Many advanced features: variable file length, auto update, search, accessible from BASIC.

Wordfix

Personal Software Services **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
Effective mini word processing program. Enter unformatted text, process in any way. 16K.

WORM

Gordon Young **Date:** 1984 **Price:** \$15.00 **Platforms:** TS 1000
Machine language word processor. User defined column width, text counter, upper/lower case option. 16K.

WP-1 Word Processing Software Package

AERCO **Model:** WP-1 **Date:** 1982 **Price:** \$15.00 **Platforms:** TS 1000
Facilitates preparation of documents and handles any size printer. Provides blinking cursor, keyboard features, insert/delete, tab, etc. 16K.

X-Word ZX101

Data-assette **Date:** 1983 **Price:** \$79.95 **Platforms:** TS 1000
Word processor with WordStar-like commands. Edit 14K with a 16K RAM pack. Total cursor control, move, delete, etc. Upper and lowercase ASCII. Automatic paragraph reformatting. 16K ROM, full RS-232 interface.

Z-Text

Mindware, Inc. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000
A word processing program to edit your written text. Justifies margins, allows revision and replacement of any part of the text. Displays up to 32 characters per line and 22 lines of text and will move text up and down rapidly. Sets up page formats and searches for key words. 16K.

Z-Word

Bob Woish **Date:** 1984 **Price:** \$6.95 **Platforms:** TS 1000
Write, delete, insert, replace. Full print position control. Output to printer; 32 column: any number of lines per page.

Z-Wryter

RCO Technical **Date:** 1982 **Price:** \$9.95 **Platforms:** TS 1000
Write, edit, and save text on cassette; edit functions to modify pages, lines, or individual characters. 16K.

ZX-99 Text

Data-assette **Date:** 1982 **Price:** \$29.95 **Platforms:** TS 1000
Word processor; prints through ZX-99. 16K.

ZX-TEXT

A.F.R. Software **Date:** 1986 **Price:** \$16.95 **Platforms:** TS 1000
Line-oriented editor that offers 1300 to 6500 words with 16-64K RAM. Editor supports word and line-based deletion, insertion, replacement. Supports editing two files simultaneously.

Accessories

3" Diskettes

Zebra Systems, Inc. **Model:** C503
Date: 1986 **Price:** \$39.95 **Platforms:** TS 2068

Diskettes for the FDD-3, FDD-3000 and Amdek disk drives.

Computer Center

A.T&A Compu-U-Ware **Date:** 1983
Price: \$124.95 **Platforms:** TS 1000

Holds computer with 16K. Space for recorder and printer. Has built in plugs. LED load monitor, On/Off switch, cassette storage.

Computer Learning Lab

Sinclair Research Ltd. **Price:** \$249.00
Platforms: ZX80

Self-paced course that teaches the ins and outs of computers. Includes ZX80.

Computer Stand Module

W. G. Squiers **Date:** 1984 **Price:** \$2.00
Platforms: TS 1000

Plans and instructions to build a table-top computer stand module to hold a ZX81/TS 1000.

Control Center

Timeworks, Inc. **Date:** 1983 **Price:** \$29.95 **Platforms:** TS 1000

Desk work station for Sinclair/Timex computers. On/off switch, accommodates all brands and sizes of RAM packs. Pocket for tapes and openings for printer and cassette connections. 3 5/8" high, 20" long and 14 1/2" wide, constructed from molded polystyrene. Will accommodate a 13" video monitor.

Control Center

AB Engineering **Model:** CC-1 **Date:** 1983 **Price:** \$20.00 **Platforms:** TS 1000

Eliminates cable changing, aural transducer permits accurate load level adjustments. Includes power switch, LED indicator, SAVE/LOAD switch, and LOAD monitor.



Crash Guard

Expense Cutter Products, Inc. **Date:** 1982 **Price:** \$19.95 **Platforms:** TS 1000

Molded acrylic guard for computer and RAM pack. Intended to prevent RAM pack wobble.

Custom Attache Case

Computa-Dek **Date:** 1982 **Price:** \$34.95 **Platforms:** TS 1000

Heavy plastic, aluminum frame case; form fitted for computer, cassette recorder, 16K RAM, power pack, TV adapter, and cords. Two pocket legal size file section in lid. Case is dust proof and may be locked.

Custom Carrying Case

Sights & Sounds Systems **Date:** 1983 **Price:** \$49.95 **Platforms:** TS 1000

High impact plastic, foam padded. Holds computer, memory, cables, recorder.

Custom Case

Date: 1983 **Price:** \$79.95 **Platforms:** TS 1000, TS 2000

Briefcase with foam insert to fit TS 1000 or TS 2000.

Accessories

Dust Cover

Computer Trader, The **Price:** \$11.95 **Platforms:** TS 1000

Form fitting dust cover. Protect your ZX81 from dust, grime and spills with a quality dust cover. The form fitted cover provides protection during storage or transport. Available colors black, tan, royal blue, brown, navy blue and burgundy.

Dust cover

Cover Craft **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000

Antistatic dust cover for the TS 1000/ ZX81.

Fieldpro

Cover Craft **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Cordura nylon carrying case for TS 1000/ZX81, accessories and manuals.

Graphics charts for Timex/Sinclair

Friendly Computer **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000

Printed forms to plan displays on paper before coding. 8 1/2 " x 11" size, printed with grid, line and column numbers, and X, Y coordinate numbers. Pack of 100.

Green Screen

Zebra Systems, Inc. **Model:** C140 **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000

Plastic optical filter. Fit any 12" TV or monitor.

Key-finder Card

Banta Software **Date:** 1984 **Price:** \$1.95 **Platforms:** TS 2068

A multi-column reference card with functions listed alphabetically, followed by the cursor necessary, then the key combination that produces the function. Printed on cardboard and designed to fit above the 2068 keyboard.

Micro Chart: BASIC algorithms

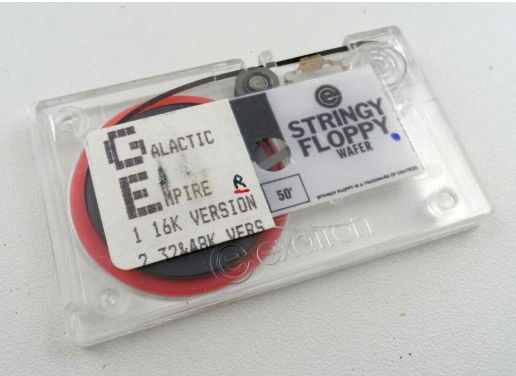
Micro Logic Corp **Price:** \$5.95 **Platforms:** TS 1000

Two-sided, 8 1/2" x 11" plastic-coated summary card of BASIC algorithms.

Micro Chart: Z80 Assembly

Micro Logic Corp **Date:** 1982 **Price:** \$5.95 **Platforms:** TS 1000

Two-sided, 8 1/2" x 11" plastic-coated Z80 machine code reference summary card.



Microwafer

A&J Micro Drive **Date:** 1984 **Price:** \$3.50 **Platforms:** TS 1000, TS 2068

Continuous loop tape ("stringy floppy") for the A & J Microdrive.

Plastic Briefcase

Mohr and Associates Corp. **Price:** \$149.95 **Platforms:** TS 1000

17.5 x 12.25 x 4.5. Wired for 110v. Preformed cavities for computer, printer, tapes, tv adapter.

Portable Computer Power

Cases Inc. **Date:** 1982 **Price:** \$54.95 **Platforms:** TS 1000

Hard case with removable lid. Protect and transport computer.

Portable Keyboard

Computer Practice Keyboard Co. **Date:** 1983 **Price:** \$4.95 **Platforms:** TS 1000

Learn and practice your keyboard while away from your computer. Regular typewriter key positions and special functions. Printed on sturdy 8 1/2" x 11" stock to fit standard binders with plastic lamination.

Power Base

Computer Add-Ons **Model:** PBS1 **Date:** 1983 **Price:** \$19.90 **Platforms:** TS 1000, TS 1500

Raised stand for TS 1000 and TS 1500. Load/Save and power switches. Front lip holds computer in place.

Print'N'Plotter Film

Computer Add-Ons **Date:** 1984 **Price:** \$3.50 **Platforms:** TS 1000

Single sheet of matte polyester film with plot and print grid along with TS keyboard illustration.

Print'N'Plotter Jotter

Computer Add-Ons **Date:** 1984 **Price:** \$5.50 **Platforms:** TS 1000

Pad of 100 sheets, each sheet has plot and print grid along with TS keyboard illustration.

Programming Form Pads

PleasantTrees Programming **Date:** 1983 **Price:** \$2.19 **Platforms:** TS 1000

50 sheets, 8 1/2 x 11; printed with all lines including edit lines on premium erasable paper. Specially printed window card comes with each pad making line reading simple.

Quickey 2068

AN-TO Productions **Platforms:** TS 2068

Series of keyboard overlays for the TS 2068 that assist the user in remembering commands for Tasword II and MSCRIPT. Overlays are made of plastic.

RAM-MIT

Laminar Inc. **Date:** 1983 **Price:** \$19.95 **Platforms:** TS 1000

Acrylic stand that supports computer and RAM unit to prevent crashes from RAM pack wobble.

RAMstrap

RAMstrap **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000

Accessories

Powerful elastic strap which fastens to anchors installed on computer and prevents RAM pack wobble.

RAMTray

RAM **Date:** 1983 **Price:** \$14.95 **Platforms:** TS 1000, TS 1500

Custom molded to hold TS 1000 or 1500, RAM pack and cassette drive. Control panel for optional switches.

Romark Screen Pads

Romark Industries, Inc. **Date:** 1982 **Price:** \$7.95 **Platforms:** TS 1000

Paper pads for planning print, print at and plot functions.

Rotronics Wafer

DAMCO Enterprises **Price:** \$3.99 **Platforms:** TS 2068

16K, 64K and 128K endless loop cassettes ("stringy floppy") for the Rotronics Wafadrive, sold by DAMCO.

Screen design aide

Robert Pearsall **Date:** 1983 **Price:** \$1.00 **Platforms:** TS 1000

Design screen using pixel X & Y coordinates, lines, and columns; graphics character set provided for reference; master suitable for copying.

Screen layout programming chart

Crystal Microsoft Ltd **Price:** \$3.95 **Platforms:** TS 1000

Features screen chart, programmable character grids and sprite grids. 50 charts per pad 8 1/2x11.

Secure Portable Unit

Earl W. Powers Associates **Date:** 1983 **Price:** \$259.00 **Platforms:** TS 1000

Stand for computer, cassette recorder, 5" TV, RAM pack. Built-in power supply.

Sinclair ZX81 Desk Console

Traffic Technology Limited **Date:** 1983 **Price:** \$40.00 **Platforms:** TS 1000

Work station for the computer, power supply, printer, cassette recorder, RAM

Accessories

pack and accessories. An on/off switch with LED; SAVE/RUN-LIST/LOAD switch simplifies saving and loading.

Stabilizer Pad

Stream Computers **Date:** 1983 **Price:** \$6.95 **Platforms:** TS 1000

Stabilizer Pad

ZOPF Industries **Date:** 1982 **Price:** \$7.49 **Platforms:** TS 1000

Strap Down

Artisan Electronics **Date:** 1983 **Price:** \$5.95 **Platforms:** TS 1000

Prevent RAM pack wobble and system crash. Kit contains high strength, precut and punched strap to hold down the computer and RAM pack, cable clamp to organize cables. Computer can be fastened to portable board or desk top.

Support for 16K RAM Pack

Fourth Design, The **Date:** 1983 **Price:** \$4.75 **Platforms:** TS 1000

Mounts on the computer, stabilized RAM pack.

TS 1000 Dust Cover

Bytes & Pieces **Date:** 1984 **Price:** \$7.95 **Platforms:** TS 1000

Sewn brown Naugahyde cover.

TS 1500 Dust Cover

Bytes & Pieces **Date:** 1984 **Price:** \$8.95 **Platforms:** TS 1500

Sewn brown Naugahyde cover.

TS 2068 Dust cover

Bytes & Pieces **Date:** 1984 **Price:** \$8.95 **Platforms:** TS 2068

Sewn brown Naugahyde cover.

TS/Basic

A. +Associates **Date:** 1983 **Price:** \$3.00 **Platforms:** TS 1000

A BASIC programming form. High quality erasable bond paper 8 1/2 x 11. 24 line screen mapped on the front; 22 line screen on the back with coordinates; varied line

density for legibility; area for notes and variables.

TS 1050 Carrying Case

Timex Computer Corporation **Model:** TS 1050 **Date:** 1983 **Price:** \$12.95 **Platforms:** TS 1000, TS 1500

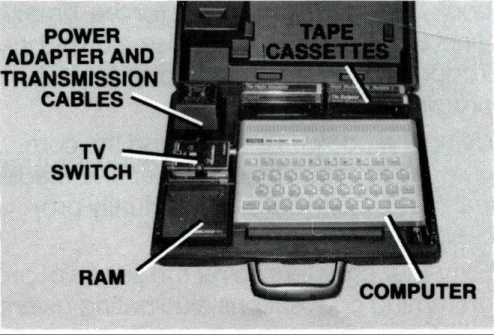
Carrying cases custom molded for TIMEX Corporation. They resemble small attache cases, approximately 13 1/2" x 10" x 3 1/2", have a black leather-like texture, distinctive Timex/Sinclair logo, and feature small fold—away carrying handles. Each case has seven individual compartments for the following items:

- ZX81, TS 1000, or TS 1500 computer
- Power supply
- Users' manual
- Cassette and video cables
- TV switch box
- TS 1016 16k RAM pack
- Four program cassette tapes

Only 2,000 were produced.

WE GOT CARRIED AWAY ...

... With this special offer for the **TIMEX Personal Computer carrying case**. It's big enough to accommodate the **T/S 1000** or **T/S 1500** and its accessories, but small enough to accompany you wherever you go. This attractively designed, lightweight, and durable carrying case is just not available at any retail store; it's a **TIMEX Computer Club** members only special, at a special, low price. Only 2,000 available, so first-come, first-served.



Accessories

Wobble Stopper

Computer Add-Ons **Model:** SW **Date:** 1983 **Price:** \$7.90 **Platforms:** TS 1000, TS 1500

Tray with plastic thumbscrew to hold RAM pack on by compression. Comes in flat or tilted versions.

ZC Organizer

Ruskraft Engineering **Date:** 1982 **Price:** \$14.95 **Platforms:** TS 1000

Beige plastic organizer for Sinclair and cassette recorder.

ZX Printer Paper

Sinclair Research Ltd. **Date:** 1982 **Price:** \$12.00 **Platforms:** TS 1000

Electro-sensitive paper. 3 rolls.

ZX81 Dust/Dirt Cover

Datametrix **Date:** 1983 **Price:** \$8.00 **Platforms:** TS 1000

Covers available in black, red, brown, green; made in durable padded PVC with facility for storing leads.

ZX81 Reference Card

Nanos Systems Corp **Date:** 1983 **Price:** \$5.95 **Platforms:** TS 1000

10-panel, 20-page accordion reference card to ZX81/TS 1000. Covers graphics, BASIC commands and functions, special commands and operators, screen layout, all codes from 0 to 255, selected ROM calls, tips on using FOR-NEXT and IF-THEN statements, ZX80 and ZX81 memory maps, Z80 timing charts, condition code chart, hex/decimal conversion, and Z80 op codes including decimal equivalents for peek and poke.

Companies

2-Bit Software

Del Mar, CA 92014
2-Bit Software specialized in programs that ran in 2K of RAM.

Sandra Hutchins, one of the principals, was a computer scientist whose area of expertise was speech recognition. Jan Zimmerman, the other principal, was a business and marketing executive who wrote several books on internet marketing.

Hutchins and Zimmerman went on to Emerson & Stern Associates, where Hutchins’ work in speech recognition gained the company numerous SBIR awards.

Two of their cassette tapes are in the Smithsonian Museum’s collections.

- 1, 2, 3, Go (Education, TS 1000)
- Basic Basic (Games, TS 1000)
- Crazey Mazey (Games, TS 1000)
- Games Sampler (Games, TS 1000)
- Gridlock (Games, TS 1000)
- Keystroke Management (Games, TS 1000)
- Making Treks (Games, TS 1000)
- Mind Beggles (Games, TS 1000)
- Mind vs. Machine (Games, TS 1000)
- Snake Eyes (Games, TS 1000)
- Square (Games, TS 1000)
- Turning the Truth Tables (Education, TS 1000)
- Working Mother’s Dilemma (Games, TS 1000)

21st Century Electronics

6813 Polk Street, Guttenberg, NJ 07093
• Filedata 2E (Database, TS 1000)
• Noteworthy (Music/Speech, TS 2068)
• Paydata 2E (Business, TS 1000)
• Piano Player (Games, TS 2068)
• Salesdata 2E (Business, TS 1000)

2K Express

119 Liberty St., Owego, NY 13827
• Seven Programs (Education, TS 1000)

3G Company

Gaston, OR 97229
• Horse Race Handicapping Program (Games, TS 1000)
• Play the Horses (Games, TS 1000)

A Lawrie (Software)

68 Bingley Road, Sunbury-on-Thames, Middlesex TW16 7RB United Kingdom

A. +Associates

175 Fifth Ave., New York, NY 10010
• TS/Basic (Paper products, TS 1000)
• Understanding Sinclair Basic (Education, TS 1000)

A. Doty

Ferguson, MO 63135
• Horse Racing Handicapping (Games, TS 1000)

A. Parsons

23 Coxhill Gdns, River, Dover, Kent U.K. CT17 0PX
• 16K Fun Learning (Education, TS 1000)
• 1K Fun Learning (Education, ZX81)
• Art and Fun (Games, TS 1000)
• Eurogame (Games, TS 1000)
• General Knowledge (Education, TS 1000)
• Geography (Education, TS 1000)
• Maths (Education, TS 1000)
• Stockbook (Business, TS 1000)
• Treasurer (Business, TS 1000)

A.C.C.S. Labs

La Crescena, CA 91214
• Computerized Home Intrusion Protection System (C.H.I.P.S.) (Home, TS 1000)

Companies

A.F.R. Software

1605 Pennsylvania Ave. #204, Miami Beach, FL 33139

Owned by Albert F. Rodriguez.

- T/S-Calc 2000 (Spreadsheet, TS 2068)
- T/S-CALENDAR 2000 (Home, TS 2068)
- T/S-Text 2000 (Word Processing, TS 2068)
- T/S-ZX Financial Report Generator (Finance, TS 1000)
- ZX-CALC (Spreadsheet, ZX81, TS 1000, TS 1500)
- ZX-CALENDAR (Home, ZX81, TS 1000, TS 1500)
- ZX-TEXT (Word Processing, TS 1000)
- ZX81 Tic-Tac-Toe (Games, TS 1000)

A.T&A Compu-U-Ware

2712 G St., Middletown, OH 45042

- Assault on Darccos (Games, TS 1000)
- Atan 2K (Math/Science, TS 1000)
- Computer Center (Accessory, TS 1000)

A&J Micro Drive

1050 East Duane Ave., Suite I, Sunnyvale, CA 94086

A&J Micro Drive was a spin-off of Exatron, the company that manufactured and marketed the Exatron Stringy Floppy (ESF). The Exatron Stringy Floppy was a continuous loop tape cartridge (“wafer”) that had some advantages over traditional cassette tapes.

Exatron also manufactured the tape drive mechanism and sold it via mail order to home computer owners. The first ESF drives were made for the TRS-80 Model I. Wafers were available in several lengths, from 5 feet (which could store 4K of data) to 75 feet (up to 64K).

By 1983, Exatron needed additional capital to improve the overall performance and quality of the wafer drives and wafers. With new investors came the name change to Entrepo (a word close to the French word for warehouse). Exatron focused on large OEM accounts and Jim Howell, son of the Exatron founder, took over the mail-or-

der stringy floppy business with his company, A&J Micro Drive.

One investor, BSR Ltd., the Hong Kong-based electronic components and consumer electronics company, acquired a third of the equity in Entrepo. BSR finalized the R&D on the wafer drive which it also manufactured. The BSR drive was used in the Rototronics Wafadrive.

- A&J Micro Drive (Disk Drive Systems, TS 1000)
- A&J Micro Drive Model 2000 (Disk Drive Systems, TS 2068)
- ESF Drive 2 (Disk Drive Systems, TS 1000, TS 2068)
- Machine Language Monitor (Programming, TS 1000)
- Microwafer (Cassettes, TS 1000, TS 2068)

A+ Computer Response

Keene, NH

Founded in 1985 by Carol and George Witham, A+ was the original QL licenser and vendor in the United States.

AARDVARK

2352 S. Commerce, Walled Lake, MI 48088

- (Escape from) Mars (Games, TS 1000)
- Adventure Writing/Deathship (Games, TS 1000)
- Circle World (Games, TS 1000)
- Derelict (Games, TS 1000)
- Earthquake (Games, TS 1000)
- Haunted House (Games, TS 1000)
- Labyrinth (Games, TS 1000)
- Nuclear Sub (Games, TS 1000)
- Pyramid (Games, TS 1000)
- Quest (Games, TS 1000)
- Trek Adventure (Games, TS 1000)

AB Engineering

11896 Clair St, Hartland, MI 48029

- Control Center (Accessory, TS 1000)
- Nuclear Reactor Simulator (Games, TS 1000)

Abacus Electronics

186 St. Helens Ave, Swansea UK

- Abacus Controller for TS 1000 (Tape, TS 1000)
- Abacus Controller for TS2000 (Tape, TS 2000, TS 2068)
- Avenger (Games, TS 1000)

ABBA Soft

2568 Woodshire Circle, Chesapeake, VA 23323

Owned by Herb Bowers.

- Money Machine II (Games, TS 2068)
- QWIK-1040 (Finance, TS 2068)
- QWIK-1040-88 (Finance, TS 2068)

ABERSOFT

7 Maes Afallen, Bow St, Dyfed, UK

- Adventure 1 (Games, TS 1000)
- Chess 1.4 (Games, TS 1000)
- Mazeman (Games, TS 1000)
- The Invaders (Games, TS 1000)

Ace Software

2 E. Oak Ave, Moorestown, NJ 08057

- Payoff (Home, TS 1000, TS 2068)
- Payout (Home, TS 1000, TS 2068)

ACS Software

7 Lidget Crescent, Roundway, Leeds UK

- ACS Assembler (Programming, TS 1000)
- ACS Debug (Programming, TS 1000)
- ACS Disassembler (Programming, TS 1000)
- ProgMerge (Programming, TS 1000)
- ProgStore Toolkit (Programming, TS 1000)
- Ultraviolet (Programming, ZX Spectrum)
- Viewpoint (Graphics, ZX Spectrum)

Active Designs

1108 Biltmore Dr., Nashville, TN 37204

Companies

- Astrology for ZX81 (Miscellaneous, TS 1000)
- HAM-AID (Math/Science, TS 1000)

Advanced Digital Innovations

2156 W. Behrend Dr., Phoenix, AZ

85027

- Slow Mode for 4K ROM (Miscellaneous, ZX80)

Advanced Energy Systems Software Group

5920 Crooked Lake Rd., Howell, MI 48843

- FINST (Finance, TS 1000)
- INLOAN (Finance, TS 1000)
- IRR/NPV (Finance, TS 1000)
- RENLEN (Utilities, TS 1000)

Advanced Interface Designs

State College, PA 16801

Owner: Brad Bennett. Designs were sold by G. Russell Electronics.

- 256x192 Bit Mapped Hi Res Graphics (Graphics, ZX81, TS 1000)
- SRS1000 Speech Recognition System (Sound/Speech, TS 2068)
- SRS2000 Speech Recognition System (Sound/Speech, TS 2068)
- Z-XLR8 (Utilities, ZX81, TS 1000)

Adventure Club

2016 Woodhillcrest Rd, Mobile, AL

36609

- 2K Edugram (Education, TS 1000)
- Four 2K Adventures (Games, TS 1000)

Adventure Games

10 35th Street, Des Moines, IA 50312

- Adventure Game (Games, TS 1000)

Companies

AERCO

Austin, TX 78760
AERCO made disk drive systems and other accessories for the TS 1000 and TS 2068 computers.

Jerry Chamkis, owner of AERCO, now makes microphone pre-amps and a very unique musical instrument called the Kos-mophone.

- CP-68 Centronics Printer Interface (Printer, TS 2068)
- CP-ZX Centronics Printer Interface (Printer, ZX81, TS 1000)
- Direct Video Modification (Video, TS 1000)
- Disassembler (Programming, TS 1000)
- FD-68 Floppy Disk Interface (Disk Drive Systems, TS 2068)
- FD-ZX Floppy Disk Interface (Disk Drive Systems, TS 1000)
- RP/M (DOS, TS 2068)
- RS-68 RS-232 Interface (RS232, TS 2068)
- STD Bus Interface (Interfacing, TS 1000)
- WP-1 Word Processing Software Package (Word Processing, TS 1000)

Ahl Computing, Inc.

39 E. Hanover Ave., Morris Plains, NJ 07950
Owned by David Ahl. Published Sync and Creative Computing magazines.

Air Capital Software

Wichita, KS 67277
• Call/Put Stock Options Analysis (Finance, TS 1000)

Ako Tech

1613 Dayton Rd., West Hyattsville, MD 20783
• 3 Factor ANOVA with Interaction (Math/Science, TS 1000)
• Division Quiz (Education, TS 1000)
• Microkjeldahl Protein Determination (Math/Science, TS 1000)
• Moisture-Oven Method (Math/Science, TS 1000)

- Multiple Linear Regression (Math/Science, TS 1000)
- Statistical Programs (Math/Science, TS 1000)

Al Jorgensen

Vergennes, VT 05491
• Barchart Program (Graphics, ZX81, TS 1000)
• Budget Program (Finance, ZX80, ZX81, TS 1000)

Al White

308 18 1/2 Ave SW, Rochester, MN 55902
• Wizard (Games, TS 1000)

Aldebaran Alpha

Hudson, Quebec Canada J0P 1H0
• ZX/TS Black Box (Games, TS 1000)

Algobit Software

Hockessin, DE 19707
• Names (Miscellaneous, TS 2068)

AlphaCom

Hong Kong
• Alphacom 32 Printer (Printer, ZX81, TS 1000, TS 1500, TS 2068)

Amanda Systems

Holmdel, NJ 07733
• Airplane (Games, TS 1000)

American Micro Products, Inc

705 N. Bowser, Richardson, TX 75081
• Address Book (Home, TS 1000)
• Algebra (Education, TS 1000)
• Arithmetic (Education, TS 1000)
• Checkbook (Home, TS 1000)
• Concentration (Games, TS 1000)
• E.E. 1 Filter Design (Math/Science, TS 1000)
• Hangman (Games, TS 1000)
• Home Brewing (Miscellaneous, TS 1000)
• Home Educator (Education, TS 1000)
• Home Inventory (Home, TS 1000)
• Island Kingdom (Games, TS 1000)
• Sketch-A-Screen (Graphics, TS 1000)
• Stock Returns (Finance, TS 1000)
• Trigonometry (Education, TS 1000)

AN-TO Productions

9009 West Elm St., Phoenix, AZ 85037
• Quickey 2068 (Accessory, TS 2068)

AND Software

47 Calvin St., West Springfield, MA 01089
• Personal Asset Manager (Finance, TS 2068)

Anderson Engineering

Tampa, FL 33610
• Port-A-Sinc (Miscellaneous, TS 1000)

Andover Software Kits

15 Winchester Road, Andover United Kingdom
• Z80 Tuition (Education, ZX81, TS 1000)

Andrew Developments

93 Beaconsfield Villas, Preston Park, Brighton United Kingdom
• ZX81 Parallel Input/Output Board (Interfacing, TS 1000)

Andy Balderson

3390 Dent Crescent, Prince Albert, SASK Canada
• Math Quiz (Education, TS 1000)

Andy Longacre, Jr.

21 Leitch Ave., Skaneateles, NY 13152
• Maxwell's Demon (Games, TS 1000)

Anglo-Southern Software

12 Roseberry Ave, Eastbourne, East Sussex, England
• Starcommand/Masterchess (Games, TS 1000)

Apple Pie Software

11 Norwalk St., West Haven CT 06516
• Superstar Baseball (Games, TS 1000)

Applied Software Development Association, Inc.

Parkin, AR 72373
• ZX Forecasting (Math/Science, TS 1000)

Companies

Apropos Technology

350 N. Lantana Ave., Camarillo, CA 9301
• Dr. Floyd (Games, TS 1000)
• Graphics Pac 1 (Graphics, TS 1000)
• SIN 16 (RAM, TS 1000)
• Snakes Alive (Games, TS 1000)
• SUPER SIN64 64K RAM (RAM, TS 1000)
• Wordplay (Games, TS 1000)

Aries Associates

511 Mary Ave., Huntingdon Valley, PA 19006
• Black Holes/Link Up (Games, TS 1000)

Arizoftx

6501 E. Monterosa Street, Scottsdale, AZ 85251
• Challenge I (Games, TS 1000)
• Chesslab 5.0 (Games, TS 1000)
• Linearsystems3.0 (Math/Science, TS 1000)
• Linreg4.0 (Math/Science, TS 1000)
• Math Facts Lab (Education, TS 1000)
• Nerd! (Games, TS 1000)
• Numerint4.0 (Math/Science, TS 1000)
• Reading Lab (Education, TS 1000)
• Zorx Wars (Games, TS 1000)

Arnold J. Gold

820 Prospect Ave., Hartford, CT 06105
• Cassette output level setting (Tape, ZX80, TS 1000)
• Overvolt protection (Power, ZX80, TS 1000)

Artic Computing

396 James Reckitt Ave, Hull, UK HU8 0JA
• 1K Chess (Games, ZX81, TS 1000)
• 1K Games (Games, TS 1000)
• Adventure A: Planet of Death (Games, TS 1000)
• Adventure B: Inca Curse (Games, TS 1000)
• Adventure C: Ship of Doom (Games, TS 1000)
• Adventure D: Espionage Island (Games, TS 1000)

Companies

- Day finder, Sequence guess, Scetcher (Utilities, ZX80)
- Galaxy Warrior (Games, TS 1000)
- Gobble Man (Games, TS 1000)
- Hangman, Matchstick game, Battleships, Hi-low (Games, ZX80)
- Invasion Force (Games, TS 1000)
- KRAKIT (Games, TS 1000)
- LCM & HCF, Prime factors, Statistics, Bar-chart plotter (Math/Science, ZX80)
- LIFE (Games, ZX80)
- Line renumberer, Stopwatch, Len(\$)(Utilities, ZX80)
- Namtir Raiders (Games, TS 1000)
- STARTREK (Games, ZX80)
- Toolkit (Programming, TS 1000)
- Zombies, Sink the Sub, Nim (Games, ZX80)
- Zombies/Sword of Peace (Games, TS 1000)
- ZX Assembler (Programming, TS 1000)
- ZX Bug (Programming, TS 1000)
- ZX Chess I (Games, TS 1000)
- ZX Chess II (Games, TS 1000)
- ZX Galaxians (Games, TS 1000)
- ZX-FORTH (Programming, TS 1000)

Artisan Electronics

Portsmouth, VA 23703

- Strap Down (Accessory, TS 1000)

Asia Tsucho Co., Ltd.

7-6, 1-chome Soto-Kanda, Chiyoda-ku Tokyo, Japan

- Data Putting (Business, TS 1000)
- Golf Game (Games, TS 1000)
- Submarine Game (Games, TS 1000)

Atlantic Computer Products

Norfolk, VA 23501

Atto-Soft

832 E. Third Street, Galesburg, IL 61401

- Joystick (Joystick, TS 1000)
- ZX-Man (Games, TS 1000)

Audio Vision

1279 N. Normandie, Los Angeles, CA 90027

- 16K RAM Pack (RAM, TS 1000)

- 64K RAM Pack (RAM, TS 1000)
- Floppy Disc Controller (Disk Drive Systems, TS 1000)
- Remote Control (Interfacing, TS 1000)
- Super ROM Board (Printer, ROM, TS 1000)

Audiograph Co.

3584 Leroy, Ann Arbor, MI 48103

- Chirper (Keyboard, TS 1000)
- On-Off Toggle Switch for Audiograph Chirper (Miscellaneous, TS 1000)

Automata Ltd

65A Osborne Road, Portsmouth, England

- Can of Worms (Games, ZX81, TS 1000)
- Love and Death (Games, ZX81, TS 1000)
- The Bible (Education, ZX81, TS 1000)

Avalon Hill Game Company

4517 Harford Road, Baltimore, MD 21214

- B-1 Nuclear Bomber (Games, TS 1000)

AVC Software

Birmingham, England

- Angles (Education, TS 1000)
- Atoms (Education, TS 1000)
- Biology 1 (Education, TS 1000)
- Biology 2 (Education, TS 1000)
- Compound (Education, TS 1000)
- Count-Down (Education, TS 1000)
- Electricity (Education, TS 1000)
- Forces (Education, TS 1000)
- Forensic Chemistry (Education, TS 1000)
- Fortune (Education, TS 1000)
- French (Education, TS 1000)
- Graph (Education, TS 1000)
- Hangperson (Education, TS 1000)
- Human 1 (Education, TS 1000)
- Human 2 (Education, TS 1000)
- Ionisation (Math/Science, TS 1000)
- Phys Problems (Education, TS 1000)
- Similes (Education, TS 1000)
- Tables (Education, TS 1000)
- War Game (Education, TS 1000)

B. A. Mullkoff

5578 Perry Town, W. Bloomfield, MI 48033

- Physical Fitness Analysis (Miscellaneous, TS 1000)

B. Sanzone

289 Baxter Lane, Milford, CT 06460

- ZX81 Improved Heatsink (Power, TS 1000)

B&B Software

1425 Lucy Lane, Madison, WI 53711

- ZX81 Checkers (Games, TS 1000)

Bani-Tech

Princeton, NJ 08540

- Software of the Month Club (Service, TS 1000)

Banta Software

8088 Highwood Way, Orangeville, CA 75662

Owner: Andrew Banta.

- Beam Design (Math/Science, TS 1000)
- Football (Games, TS 1000, TS 2068)
- Home Heating Costs (Home, TS 1000)
- Jackpot Casino (Games, TS 1000)
- Key-finder Card (Accessory, TS 2068)
- Murder in the Ram (Games, TS 1000)
- Pack ’em in Monzxer (Games, TS 1000)
- Pipe Flow (Math/Science, TS 1000)
- Screen-Calc (Spreadsheet, TS 1000, TS 2068)
- Screen-File (Database, TS 1000)
- Screen-Solv (Spreadsheet, TS 2068)
- Starhike (Games, TS 1000)
- Super Monzxer (Games, TS 1000)
- T/S Tutor (Education, TS 1000)

BARLOG Software

41 N. Geyer Rd, Kirkwood, MO 63122

Owner: Bob Lucas.

- 2K Games Pack (Games, TS 1000)
- 64K RAM Pack (RAM, TS 1000)
- Eagle Lander (Games, ZX80, ZX81, TS 1000)
- Machine Code Starter (Programming, TS 1000)

Companies

- Meal-a-Morph (Games, TS 1000)
- Picture Plot (Art, ZX80, ZX81, TS 1000)
- Texter (Word Processing, TS 1000)
- Texter II (Word Processing, TS 1000)

Barry Carter

Warren, MI 48090

BASCO

289 Baxter Lane, Milford, CT 06480

- Address File/Mailing List (Business, TS 1000)
- Graph Power (Graphics, TS 1000)
- Home Financial Planning (Finance, TS 1000)
- Improved Heat Sink (Power, TS 1000)
- Super Mortgage (Finance, TS 1000)

Basic

3705 Biscayne Blvd, Miami, FL 33137

Basically Programming

2528 W. Olive, Fullerton, CA 92633

Linda Repasky, owner.

Basically Software Company

Syracuse, NY 13220

- Poker (Games, TS 1000)

BASICare Microsystems, Inc.

5 Dryden Ct., London SE11 4NH United Kingdom

- BASICare Modular Expansion System (Miscellaneous, TS 1000)
- DROM (ROM, TS 1000)
- LINK a (Miscellaneous, TS 1000)
- Minimap (RAM, TS 1000)
- PERICONa (Interfacing, TS 1000)
- PERICONb (Interfacing, TS 1000)
- PERICONc (Printer, TS 1000)
- Persona (Miscellaneous, TS 1000)
- RAM 08 (RAM, TS 1000)
- RAM 16 (RAM, TS 1000)
- RAM 64 (RAM, TS 1000)
- SONUS (Sound/Speech, TS 1000)
- Toolkit (ROM, TS 1000)
- Userfont (Graphics, TS 1000)

Beacon Electronics

5002 E. Broadway, Tucson, AZ 85711

- Caterpillar (Games, TS 1000, TS 2068)

Companies

- EPROM Reader/Programmer (Miscellaneous, TS 1000)
- Plane Crash (Games, TS 1000, TS 2068)

Beaver Computer Products

999 Munroe Ave., Winnipeg, Manitoba Canada R2K 1J4

- Advanced Video Modes (Graphics, TS 2068)
- Beaver Writer (Word Processing, TS 2068)
- Character Font Generator (Graphics, TS 2068)

Berry

606 S. E. 1st Ave, Ocala, FL 32671

- Timex Accounting (Business, TS 1000)

BI-PAK Semiconductors

Ware, Hertfordshire, United Kingdom

- ZON X-81 (Sound/Speech, TS 1000)

Bingel Robotics

3540 SW Archer Rd., Gainesville, FL 32608

Owner: Tom Bingel.

- Motion Platform for ZX81 and TS 1000 (Miscellaneous, TS 1000)
- RMP 2000 (Miscellaneous, TS 1000)

Biocal Software

167 Wilson St, Petaluma, CA 94952

- 3D Tic Tac Toe (Games, TS 1000)
- 6-Shooter (Games, TS 1000)
- 8-Ball (Games, TS 1000)
- Amazing (Games, TS 1000)
- Artillery (Games, TS 1000)
- Backgammon (Games, TS 1000)
- Bandit (Games, ZX81, TS 1000)
- Bar-Chart (Business, TS 1000)
- Bar-Dice (Games, TS 1000)
- Base-N (Utilities, TS 1000)
- Blackjack (Games, TS 1000)
- Bomber (Games, TS 1000)
- Bong (Games, TS 1000)
- Cat and Mouse (Games, TS 1000)
- Catalog (Database, TS 1000)
- Chase (Games, ZX81, TS 1000)
- Checkbook (Home, TS 1000)

- Checkers (Games, TS 1000)
- Clients (Business, TS 1000)
- Craps (Games, TS 1000)
- Cruiser (Games, TS 1000)
- Cube-Sym (Games, TS 1000)
- Display (Utilities, TS 1000)
- Dogfight (Games, TS 1000)
- Flee (Games, ZX81, TS 1000)
- Flower (Games, TS 1000)
- Fylit (Database, TS 1000)
- Gin-Rummy (Games, TS 1000)
- Golf (Games, ZX81, TS 1000)
- Guess the Animal (Games, TS 1000)
- Hangman (Games, TS 1000)
- Histogram (Business, TS 1000)
- Hollywood (Games, TS 1000)
- ISAM (Database, TS 1000)
- Klingon Wars (Games, TS 1000)
- Library (Home, TS 1000)
- Life (Games, ZX81, TS 1000)
- Loan (Finance, TS 1000)
- Maze (Games, TS 1000)
- Meelborn (Games, TS 1000)
- Menu (Utilities, TS 1000)
- NIM (Games, TS 1000)
- Note-pad (Home, TS 1000)
- Orbit (Games, TS 1000)
- Orders (Business, TS 1000)
- Pong (Games, ZX81, TS 1000)
- Quicksand (Games, TS 1000)
- Race (Games, TS 1000)
- Rebound (Games, TS 1000)
- Reminder (Home, TS 1000)
- Riverside (Games, TS 1000)
- Sales (Business, TS 1000)
- Secrets (Games, TS 1000)
- Shark-Hunt (Games, TS 1000)
- Skeet (Art, ZX81, TS 1000)
- Snare (Games, TS 1000)
- Sniper (Games, TS 1000)
- Solitaire (Games, TS 1000)
- Stock Market (Games, TS 1000)
- Tac-Tix (Games, TS 1000)
- Tower (Games, ZX81, TS 1000)
- Treasure (Games, TS 1000)
- War (Games, TS 1000)
- Wolfpack (Games, TS 1000)
- Worm (Games, TS 1000)
- Z80DA (Programming, TS 1000)

Companies

- Sink the Sub (Games, TS 1000)
- Telescope Design (Math/Science, TS 1000)
- Z-Word (Word Processing, TS 1000)

Bomis Prendin Software

Washington, DC 20005

Also a band.

- IBAL (Graphics, TS 1000)
- The Great Communicator and Opmax (Games, TS 1000)

Bonnie & Clyde Software

Albany, NY 12212

- Memory Scope (Programming, TS 1000)

Boston Electronic Systems Training

1420 Providence Hwy., Norwood, MA 02062

- BEST Computer Coach (Education, TS 1000)

Bottle Cap Software

1284 Brushwood Ave, Cincinnati, Ohio 45224

Owner: Michael Fellerski.

Fellerski also published The Sinclair Desktop Publishing Journal, The Sinclair Music & MIDI Journal and Sinclair World Gazette.

- Cassette Index Card Maker (Graphics, TS 2068)
- Checkbook Keeper/Balancer (Finance, TS 2068)
- Maxi-Bill Credit Card Payer (Finance, TS 2068)

Brainchild Computer Works, Inc.

Pewaukee, WI 53072

Contact: Gwen Marsh.

- Gaamworks (Miscellaneous, TS 1000)
- Kolorworks (Video, TS 1000)

Birkhauser Boston Inc.

380 Green Street, Cambridge, MA 02139

Blaine Geddes

238 King St., Truro, Nova Scotia Canada B2N 3L6

- 6 Programs (Games, TS 1000)

Blake Kincaid

3704 S.E. 42nd Ave., Portland, OR 97206

- ZXBOMBER (Games, TS 1000)

Bob Berch

19 Jaques, Rochester, NY 14620

Bob Brown

53 Cliff Ln., Levittown, NY 11756

- Kong (Games, TS 1000)
- Maze Man (Games, TS 1000)
- Renum (Programming, TS 1000)

Bob Norman

12817 Rinecrest Rd., Herndon, VA 22071

- Financial Analysis (Finance, TS 1000)

Bob Swoger

613 Parkside Circle, Streamwood, IL 60107

- 747 Flight Simulator (Games, TS 2068)

Bob Wells

3090 Meadowgreen Way, West Jordan, UT 84084

- Electronic Programs for the Hobbyist (Math/Science, TS 1000)

Bob Woish

1700 Butler Pike, Conshohocken, PA 19428

- 2K Game Pack Special (Games, TS 1000)
- Compu-Pen (Graphics, TS 1000)
- Day (Miscellaneous, TS 1000)
- Galaxy (Games, TS 1000)
- Hi-or-Lo (Games, ZX81, TS 1000)
- Mine Field (Games, TS 1000)
- Push Processing (Miscellaneous, TS 1000)

Companies

Bridge Software

36 Fernwood, Marple Bridge, Stockport SK6 5BE United Kingdom

- Games (Games, ZX81, TS 1000)
- Graphics (Art, ZX81, TS 1000)
- Multigraphics (Graphics, TS 1000)
- Statistics (Math/Science, ZX81, TS 1000)

Brittanysoft Ltd

Twin Falls, ID 83301

- Check Register, Inventory (Business, Home, TS 1000)

Bronder Entertainment

2444 N. 41st St., Milwaukee, WI 53219

- Craps (Games, TS 1000)
- Slot Machine (Games, TS 1000)

Bronze Star Software

Chicago Ridge, IL 60415

- Football Predictor II (Games, TS 1000)
- Sub Commander (Games, TS 1000)
- ZT (Games, TS 1000)

Brook Forest Productions

19528 Ventura Blvd, Tarzana, CA 91356

Steve North’s company, sold his programs.

Brown Cottage Industries

5486 Bright Hawk Court, Columbia, MD 21045

- Cross-Referencer (Database, TS 1000)
- Crossword-Puzzler (Games, TS 1000)
- Crypto-Whammer (Games, TS 1000)
- KROK (Games, TS 1000)
- Noah’s Ark (Games, TS 1000)
- Point-Spreader 83 (Games, TS 1000)
- Star Search (Games, TS 1000)

Brown Software

53 Cliff Ln., Levittown, NY 11756

Budget Robotics & Computing

Tucson, AZ 85731

Owner: Bruce Taylor.

Budgetsoft

230 N Main, Rushville, IN 46173

- Fish Locator (Miscellaneous, TS 2068)

Bug-Byte Software

100 The Albany, Old Hall Street, Liverpool United Kingdom

- Bumpapak-25 (Games, ZX80)
- Constellation (Math/Science, TS 1000)
- Damsel and the Beast (Games, TS 1000)
- Dictator (Games, TS 1000)
- French Vocab (Education, ZX80)
- House of Gnomes (Games, TS 1000)
- Invaders (Games, TS 1000)
- Junior Maths (Education, ZX80)
- Mazogs (Games, TS 1000)
- Multifile (Database, ZX81)
- Multifile Plus (Database, ZX81, TS 1000)
- Multiple Choice (Education, ZX80)
- Program Pack 1 (Games, ZX81, TS 1000)
- Program Pack 2 (Games, TS 1000)
- Program Pack 3 (Games, ZX81, TS 1000)
- Program Pack 4 (Games, TS 1000)
- Program Pack 5 (Games, TS 1000)
- Program Pack 6 (Games, TS 1000)
- Program Pack 7 (Games, TS 1000)
- Program Pack 8 (Games, TS 1000)
- Programming Course, Second edition (Education, ZX80)
- Space Trek (Games, TS 1000)
- ZXAS (Programming, ZX80, TS 1000)
- ZXDB (Programming, ZX80, TS 1000)
- ZXTK (Programming, TS 1000)

Burnett Electronics

1729 Woodland Ave, Palo Alto, CA 94303

- Keyboard beeper (Keyboard, ZX80)
- Video Inverter Kit (Video, ZX80)

Business Management Specialists

Dearborn, MI 48126

Advertised as B.M.S.

- Lost Continent (Games, TS 1000)

Busyness

San Francisco, CA 94101

Butler, Currie & Hook

19 Borough High Street, London SE1 9SE United Kingdom

Byte Power

1748 Meadowview Ave, Pickering, Ontario Canada L1V 3G8

- 1st Class Fonts II (Graphics, TS 2068)
- 1st Class Programs (Miscellaneous, TS 1000)
- 2+Fast (Miscellaneous, TS 2068)
- Best of Arcade Games (Games, TS 2068)
- Best of Business and Utilities (Business, Utilities, TS 2068)
- Best of Strategy and Board Games (Games, TS 2068)
- Byte Power 1st Class Magazine (Periodicals, TS 2068)
- Print Factory (Graphics, TS 2068)
- Tape Corrector (Utilities, TS 2068)
- The Companion (Graphics, TS 2068)
- The D.U.S. (Miscellaneous, TS 2068)

Byte-Back Co

Leesville, SC 29070

BYTE-BACK started producing peripherals for the Sinclair computer in 1981.

Their first product, a relay controller, was used by customers to control and automate projects.

The original owner closed the company in the mid-1980s. David Leech, a former employee, purchased the company and continued to sell existing inventory.

In the late 1980s, Leech introduced multifunction controllers for the IBM PC.

- Analog-Digital Module (Interfacing, TS 1000, TS 2068)
- BB-1 Control Module (Interfacing, ZX80, ZX81)
- BB-68 Controller (Interfacing, TS 2068)
- Byte Back Keyboard (Keyboard, TS 1000)
- M-16 Memory Module (RAM, ZX80, TS 1000)

Companies

- M-48 Memory Module (RAM, ZX81, TS 1000)
- M-64 Memory Module (RAM, TS 1000)
- MD-1 Modem (RS232, ZX80, ZX81, TS 1000)
- MD-2B Modem (RS232, ZX81, TS 1000)
- MD-68 Modem (RS232, TS 2068)
- Parallel 1000 (Printer, TS 1000)
- Parallel 2068 (Printer, TS 2068)
- Real Time Clock (Miscellaneous, TS 1000, TS 2068)
- RS-232 for 2068 (RS232, TS 2068)
- RS-232 Module (RS232, TS 1000)
- UM-16 16K RAM Pack (RAM, TS 1000)
- UM-64 64K RAM Pack (RAM, TS 1000)

Bytes & Pieces

550 N. 68th St, Wautwatosa, WI 53213

- On/Off Switch (Power, TS 1000)
- TS 1000 Dust Cover (Accessory, TS 1000)
- TS 1500 Dust Cover (Accessory, TS 1500)
- TS 2040 Dust Cover (Accessory)
- TS 2068 Dust cover (Accessory, TS 2068)

Bytesize Micro Technology

Seattle, WA 98111

Also known as Bytesize Computer Products. In 1984, they changed their name to Omnitronix.

- Z-DUBBER (Tape, ZX80, ZX81, TS 1000, TS 2068)

C-20 Magazine

515 N. Ridge Road, Wichita, KS 67212

C. Dos-Santas

Fountain Valley, CA 92728

TS 2068 software.

C. W. Associates

419 N. Johnson St., Ada, OH 45810

In 1986, they became authorized QL dealers.

- City 2068 (Games, TS 2068)
- Supershaper (Graphics, TS 2068)

Companies

C. W. Percival

193 Peaceable St., Ridgefield.CT 06877

- Smart Reversi (Games, ZX80)

Cactus Software

3754 E. Desert Cove Ave, Phoenix, AZ 85028

- Character Sets for 2068 (Graphics, TS 2068)
- Mega-Draw (Art, ZX Spectrum)

CAI Instruments, Inc.

Midland, MI 48640

- ASCII Communications Firmware (ROM, TS 1000)
- Bio Rhythm (Games, TS 1000)
- CAI/ESF Mass Storage Device (Disk Drive Systems, TS 1000)
- CAI/O Board (Interfacing, TS 1000)
- CAI/P40 Printer (Printer, TS 1000)
- Home Finance (Home, TS 1000)
- Math Tutorial Package (Education, TS 1000)
- Modem (RS232, TS 1000)
- Network Communications Package (RS232, TS 1000)
- Serial Printer Firmware (ROM, TS 1000)
- Stocks (Home, TS 1000)
- Widget (Interfacing, ZX80)
- WIDGIPRINT Printer (Printer, TS 1000)
- WIDGITAPE (Tape, ZX80, TS 1000)
- Wiz Bang Math (Education, TS 1000)

Calliope Software

4130 Coe Dr. N.E., Albuquerque, NM 87110

Owner: Dan Tandberg, MD.

- Mazeball (Games, TS 1000)
- Metagraphics (Graphics, TS 1000)
- Timeblasters (Games, TS 1000)

Callisto Software

924 2nd Street East, Saskatoon Canada S7H 1R1

Owner: James Hastings-Trew.

Hastings-Trew was a Kolorworks owner and wrote a graphics toolkit for the product.

- SincArtist (Art, TS 1000)
- SincArtist HR (Art, TS 1000)
- ZX Hi-Res (Graphics, TS 1000)

Calpac Computer Software

British producer of software for the ZX Spectrum. SoftSync converted some Calpac programs to the Timex/Sinclair 2068 for Timex Computer Corporation.

Cambridge Microelectronics

1 Milton Rd., Cambridge CB4 1UY United Kingdom

- CRAMIC-81 (RAM, TS 1000)
- MEMIC-81 (RAM, TS 1000)
- ROM-81 (ROM, TS 1000)

Campbell Systems

15 Rous Rd, Buckhurst Hill, Essex England 1G9 6BL

- Fast One, The (Database, TS 1000)
- Gulp (Games, TS 1000)
- Masterfile (Database, TS 2068)
- ZX80/81 Database (Database, ZX80, ZX81)

Canaan Software

- Grafist (Art, TS 2068)
- Musicola (Music/Speech, TS 2068)

Cascade Software

47 Fruehauf St., Buffalo, NY 14226

American address/distributor for Cascade Games, 1-3 Haywra Crescent, Harrogate, North Yorkshire, HG1 5BG, England.

- Cassette 50 (Games, TS 1000)

Cases Inc.

Seattle, WA 98133

- Portable Computer Power (Accessory, TS 1000)

CDS Micro Systems

10 Westfield Close, Tickhill, Concaster, DN11 9LA United Kingdom

Cecil Bridges

1248 N.Denver, Tulsa, OK 74106

- Four Games for the ZX-80 (Games, ZX80)

Celestial Software

3010 Warrington Ave., Lakeland, FL 33803

- Computer Navigation (Math/Science, TS 1000)

Chadwell’s Software

4144A 97 Street, Edmonton, Alberta, Canada T6E 5Y6

Charles Drury

40 Westgate, Chestnut Hill, MA 02135

- Marbles, Mazes and Sink Holes (Games, TS 1000)
- ZXVER (Utilities, TS 1000)

Charles J. Bonner

Norfolk, VA 23505

- Flight Simulations (Games, TS 1000)
- Math by Numbers (Education, TS 1000)

Charles Stelding

1415 South Baxter, Tyler, TX 75701

- Desktop Publisher (Graphics, TS 2068)

Chia-Chi Chao

73 Sullivan Dr., Moraga, CA 94556

- Disk File Manager (DOS, TS 2068)
- MSDisk (Miscellaneous, TS 2068)
- OmniDisk (Spreadsheet, TS 2068)
- Word Twister & Vocabuilder (Education, TS 1000, TS 1500, TS 2068)

Chris Taraba

Goderich, ONT Canada N7A 3Y5

- Acid Rain/Missile Alert (Games, TS 1000)
- Joystick for ZX81 (Joystick, TS 1000)

Christian Software

Bettsville, OH 44815

- David and Goliath (Education, TS 1000)
- The Ark (Education, TS 1000)

Cinagro Software

155 Seventh Street, Rochester, NY 14609

Initially advertising under the name Bob Berch, the company became Cinagro Software in July 1983.

Companies

- EPROM Cartridge Kit (ROM, TS 1000)
- Serial Printer Interface (RS232, TS 1000)
- The ZX Compiler (Programming, TS 1000)
- ZX81 Assembler and Disassembler (Programming, TS 1000, TS 1500)

Cinevision System

Montebello, CA 90640

- Loadstar (Tape, TS 1000)

Circle Chess Journal

Des Plaines, IL 60017

Owner: Alphonso F. Stanonis.

Invented Circle Chess in the 1960s. An early Sinclair computer enthusiast, he advertised in many Sinclair publications.

ClearTouch

Anacortes, WA 98221

- ClearTouch (Keyboard, TS 1000)

CLEVA Computer Ware

Brooklyn, NY 11202

- Crazy-cards/Cube (Games, TS 1000)
- De-bugger (Programming, TS 1000)
- Snakebite/Battle (Games, TS 1000)
- Starship Trojan/Princess of Kraal (Games, TS 1000)
- Startrack/Fungaloids (Games, TS 1000)

Cliff Nunnery, NU4V

313 Vaugh St., Fort Walton Beach, FL 32548

- CWSS (Miscellaneous)

Clifford & Associates

13910 Halldale Ave, Gardena, CA 92049

Owner: Dave Clifford.

- Z-Link (Hardware, TS 2068)

Cobra Technology Limited

378 Caledonian Rd., Islington, London, U.K. N1 1DY

- 232 Modem (RS232, TS 1000)
- Centronics Interface (Printer, TS 1000)
- Power Supply Buffer (Power, TS 1000)
- RS232C Interface (RS232, TS 1000)

Companies

Collins Computing

The Gatehouse, Whinburgh, Dereham, Norfolk NR19 1QR

- Murgatroyds (Games, TS 1000)
- Murgatroyds Revenge (Games, TS 1000)

Commonwealth Agency, The
3000 Dogwood Terr., Chesapeake, VA 23321

- Strip down (RAM, TS 1000)

Communications System Laboratories
94-165 Leokane St, Waipahu, HI 96797

- Data Conditioner II (Tape, TS 1000)

Comp Shop, Ltd.
14 Station Road, New Barnet, Hertfordshire EN5 1QW United Kingdom

Comp Shop produced the MicroAce computer.

- Full animated graphics for ZX80 (Graphics, ZX80)

Componedex Ltd.
Leighton Buzzard, Bedfordshire United Kingdom LU7 7UX

- RAMPORT (Interfacing, RAM, TS 1000)

Comprocsys, Ltd
29 Campden Road, South Croydon, Surrey UK CR2 7ER

- ASZMIC External Card (Interfacing, TS 1000)
- ASZMIC ROM (ROM, TS 1000)

Compu-Pak
2615 Waugh Dr., Suite 295, Houston, TX 77006

- 16K RAM Pack (RAM, TS 1000)
- 64K RAM Pack (RAM, ZX81, TS 1000)
- Centronics Parallel Printer Interface (Printer, TS 1000)
- Compu-Board (Interfacing, TS 1000)
- EPROM Programmer (Miscellaneous, TS 1000)
- RS-232 Interface (RS232, TS 1000)
- Telephone Dialer (Interfacing, TS 1000)

- Wireless Digital Thermostat (Miscellaneous, TS 1000)

Compuball
Vestal, NY 13850

- Compuball (Games, TS 1000)

Compucraft
Hinsdale, NH 03451

- SIFT I (Math/Science, TS 1000)
- SIFT II (Math/Science, TS 1000)

Compumentor
1919 14th St., Boulder, CO 80302

- PI2040 Printer Interface (Printer, TS 1000)

Compusa Corporation
1101 Bristol Rd, Mountainside, NJ 07092

Compusa was a subsidiary of Centronic, Inc. Compusa produced floppy disk systems for the ZX-81/TS-1000.

Frank Kaplan was a sales manager at Centronic and spokesperson for Compusa.

- Bleeper System (Keyboard, TS 1000)
- Color SIN 81 (Video, TS 1000)
- FDC-100 Floppy Disk System (Disk Drive Systems, TS 1000)
- Floppy Disk Interface (Disk Drive Systems, TS 1000)
- Tape Loading System (Tape, TS 1000)

CompuSoft Publishing
San Diego, CA 92119

- Speed Reading Course (Education, TS 1000)

Compusound
32 Langley Cl, Redditch B98 0ET, UK

- Telesound 84 (Sound/Speech, TS 1000)

Compusport
Springfield, MA 01101

- Special Situation Selections Program (Games, TS 1000)

Computa-Dek
6009 Kenwood Dr., Nashville, TN 37215

- Custom Attache Case (Accessory, TS 1000)

Computech
1037 Morse Lee, Evanston, WY 82930

- Billtex (Business, TS 1000)
- Direct Reverse Video Module (Video, TS 1000)

CompuTech & Software Industries, Inc.
Redondo Beach, CA 90277

- 64K RAM Pack (RAM, ZX80, ZX81, TS 1000)
- The Math Teacher (Education, TS 1000)

Computer Add-Ons
414 South Evergreen, Arlington Heights, IL 60005

- 16K RAM Pack (RAM, TS 1000)
- 48K RAM for TS2000 (RAM, TS 2000, TS 2068)
- 64K RAM Pack (RAM, TS 1000)
- Power Base (Accessory, TS 1000, TS 1500)
- Print’N’Plotter Film (Paper products, TS 1000)
- Print’N’Plotter Jotter (Paper products, TS 1000)
- RAM for TS2000 (RAM, TS 2000, TS 2068)
- Speech Synthesizer (Sound/Speech, TS 2000)
- Wobble Stopper (Accessory, TS 1000, TS 1500)

Computer Assistance Incorporated
Cincinnati, OH 45201

- Data-Manager (Database, TS 1000)
- Finance-Manager (Finance, TS 1000)
- Program-Manager (Programming, TS 1000)

Companies

Computer Classics
Cabool, MO 65689

Owner: Dan Elliot. Also known as Promise Land Electronics. Repair service for many microcomputers.

Computer Continuum
301 16th Ave, San Francisco, CA 94118

A prolific life-long inventor and amateur scientist, Eric Reiter started Computer Continuum in 1981, after dropping out of San Francisco State University. One of his first products was an analog interface board that made a digital oscilloscope with Fast Fourier Transform spectral analysis.

- Analog Interface Board (Interfacing, ZX81, TS 1000, TS 1500)
- Buffered Bus Expansion Board (Interfacing, ZX80, ZX81)
- Business/File Management Program (Database, TS 1000)
- Dual Trace ‘Scope’ (Math/Science, TS 1000)
- EPROM Board (ROM, TS 1000)
- Frequency Analysis ‘FFT’ (ROM, TS 1000)
- High Resolution Printer Program (Graphics, TS 1000)
- Ribbon cable connector (Miscellaneous, TS 1000)
- UHF Modulator (Video, TS 1000)

Computer Engineering Services (The Jarrett Company)
Show Low, AZ 85901

- Compute (Programming, TS 1000)
- Mutual Fund Advisor (Finance, TS 1000)
- Rubik’s Master (Games, TS 1000)
- Slow/Fast kit for ZX80 with 8K ROM (Graphics, ZX80)

Computer Practice Keyboard Co.
616 9th St., Union City, NJ 07087

- Portable Keyboard (Accessory, TS 1000)

Companies

Computer Software Associates

50 Teed Drive, Randolph, MA 02368

- 1K Games (Games, TS 1000)
- Bulls and Cows (Games, ZX81, TS 1000)
- Four in a Row (Games, TS 1000)
- Galactic Patrol (Games, TS 1000)
- Graphics Starter Pack (Graphics, ZX81, TS 1000)
- Lynchmob (Games, TS 1000)
- Mugsy (Games, TS 1000)
- Multigraphics 2.3 (Graphics, TS 1000)
- Nim (Games, TS 1000)
- Robot Tanks (Games, TS 1000)
- Slides and Ladders (Games, TS 1000)
- Statistics Package (Math/Science, ZX81, TS 1000)
- Super Invaders (Games, TS 1000)
- Towers of Brahama (Games, ZX81, TS 1000)

Computer Software Co.

706 S. Center, Bloomington, IL 61701

Computer Trader, The

San Diego, CA 92120

- Dust Cover (Accessory, TS 1000)

Computer Ware Publishing

234 Fifth Ave, New York, NY 10001

- Make It To The Top (Miscellaneous, TS 1000)
- Nest Egg II (Finance, TS 1000)

Computer WARE-House Co.

W. Bloomfield, MI 48304

- The Odds-Maker (Games, TS 1000)

Computer-Wear Software

Riverdale, NY 10471

- 2 Program Advertising Package (Business, TS 1000)
- Attack Force (Games, TS 1000)
- Checks & Balances (Home, TS 1000)
- Demo Sales Program (Business, TS 1000)
- Federal Tax Forms (Finance, TS 1000)
- Maze (Games, TS 1000)
- N.Y. State Tax (Finance, TS 1000)
- Scramble (Games, TS 1000)

- Speed Reading (Education, TS 1000)
- Starship Invasion (Games, TS 1000)
- Tale Teller I (Education, TS 2068)
- Tale Teller II (Education, TS 2068)

Computercraft

156 Drakes Ln., Summertown, TN

38483

- COMPU-STAT (Math/Science, TS 1000)

Computex Cases

Stanhope Rd, Camberley, Surrey, England GU15 3PS

Computhink, Inc.

Hopkins, MN 55434

- 20 Programs Cassette (Home, TS 1000)

Computronics

Okemos, MI 48864

- ZX Open (Games, TS 1000)

Compuwiz Software

Mountain View, CA 94009

- 2K Game Pack (Games, TS 1000)
- Arcade Fun (Games, TS 1000)
- Casino Fun (Games, TS 1000)
- Casino Fun II (Games, TS 1000)
- Mind Benders (Games, TS 1000)
- The Educator (Education, TS 1000)

Control Technology

39 Gloucester Road, Gee Cross, Hyde, Cheshire SK 14 5JG United Kingdom

- Pack 16/81/1 (Games, TS 1000)

Cook Laboratories, Inc.

Norwalk, CT 06586

- Cook TransCoder I (Miscellaneous, TS 1000)

Cosmonics

San Jose, CA 95157

- 2K Memory Upgrade (RAM, ZX81)
- CFASTDATA (Programming, TS 1000)
- CFASTDUET (Programming, TS 1000)
- CIOUTIL (Programming, TS 1000)
- RS232/TTL Level Converter Plans (Interfacing, TS 1000)
- Serial Input Port Plans (Interfacing, TS 1000)

- Serial Output Port Kit (RS232, TS 1000)
- Software for Serial Input (Utilities, TS 1000)
- Software for TTL Serial Output Port (Utilities, TS 1000)
- TTL Serial Input/Output Port Package (Interfacing, RS232, TS 1000)

Cottage Technology

5720 W. Little York, Houston, TX 77091

Owner: Alan R. Czarnek.

- 10 Best Routines (Programming, TS 1000)
- ACZ Check Register (Business, TS 1000)
- ACZ Easy Graph (Graphics, TS 1000)
- ACZ General Ledger (Business, TS 1000)
- ACZ General Ledger 2000 (Business, TS 2068)
- CARDCO Numeric Keypad (Keyboard, TS 2068)
- Protector (Games, TS 1000)
- Reverse Video Module (Video, TS 1000)
- The Last Cassette/16K Fix (Tape, TS 1000)
- Video Monitor Output (Video, TS 1000)
- You're The Boss (Games, TS 1000)

Cover Craft

Amherst, NH 03031

- Dust cover (Accessory, TS 1000)
- Fieldpro (Accessory, TS 1000)

CRC Software

2901 Auburn Road, Auburn Hills, MI 48057

- Alphabet Soup (Education, TS 1000)
- Appointment Planner (Business, TS 1000)
- Bill Master (Business, TS 1000)
- Check Book (Home, TS 1000)
- Computer Match (Games, TS 1000)
- CRC Smart Soft Face (Printer, TS 1000)
- Horse Master (Games, TS 1000)
- Little Black Book (Home, TS 1000)
- Panzer SS (Games, TS 1000)
- Reline (Programming, TS 1000)
- Statement Aid (Home, TS 1000)
- ZX Battleship (Games, TS 1000)

Companies

Creative Computing Press

39 East Hanover Ave., Morris Plains, NJ 07950

Creitech

24 Evans Rd., Marblehead, MA 01945

- Algebra Solver (Math/Science, TS 1000)
- Calculus Solver (Math/Science, TS 1000)
- Circuit Analysis (Math/Science, TS 1000)
- Differential Equation Solver (Math/Science, TS 1000)
- Electronics Tutor (Education, TS 1000)
- Finance Management (Finance, TS 1000)
- Flight Assistant (Miscellaneous, TS 1000)
- French Tutor (Education, TS 1000)
- German Tutor (Education, TS 1000)
- Italian Tutor (Education, TS 1000)
- Machine Code Master (Education, TS 1000)
- Math Tutor (Education, TS 1000)
- Math Tutor - Advanced (Education, TS 1000)
- Matrix Math (Math/Science, TS 1000)
- Physics Solver (Math/Science, TS 1000)
- Physics Tutor (Education, TS 1000)
- Sinclair Basic Master (Education, TS 1000)
- Spanish Tutor (Education, TS 1000)

Crockett Software

809 New York Ave, Martinsburg, WV 25401

- Super-Draw (Art, TS 1000)

Crosscurrents

417 Clinton St., Brooklyn, NY 11231

- 16 Program Music Course (Education, TS 1000)

Crown Computers

9 Holme Close, Woodborough, Nottingham United Kingdom

- Word Pool (Education, ZX80, ZX81)

Crypt

303 Meadowlark Lane, Durant, OK

74701

- Cryptographics Programs (Math/Science, TS 1000)

Companies

Crystal Coast Software

Morehead, NC 28557

- 3 Trivia Quizzes (Games, TS 1000)

Crystal Microsoft Ltd

Houston, TX 77244

- Android (Games, TS 1000)
- Games Pack #1 (Games, TS 1000)
- Jewel Thief (Games, TS 1000)
- Screen layout programming chart (Paper products, TS 1000)
- Sunken Treasure (Games, TS 1000)
- Yahtzee (Games, TS 1000)

CSI Company

132 E. Pasco Lane, Cocoa Beach, FL 32931

Owner: Charles Bucher.

- Battery backup unit (Power, TS 1000)
- Vocab Builder (Education, TS 1000)

Curry Computer

5344 West Banff Ln, Glendale, AZ 85306

- Alien 8 (Games, ZX Spectrum)
- BIZ (Games, TS 2068)
- Bugaboo the Flea (Games, TS 2068)
- Fourth Protocol (Games, ZX Spectrum)
- Frankie Goes To Hollywood (Games, ZX Spectrum)
- Highway Encounter (Games, ZX Spectrum)
- LodeRunner (Games, ZX Spectrum)
- Monty is Innocent (Games, ZX Spectrum)
- OmniEmu (Emulator, TS 2068)
- Red Alert (Games, TS 1000)
- Softaid (Software, ZX Spectrum)
- Tapper (Games, ZX Spectrum)
- tBuff telecom (Terminal, TS 2068)

Custom Electronics Device Corp.

Salem, WI 53168

- 5 Business Programs (Business, TS 1000)
- Checking Account (Business, TS 1000)
- E-Z Bookkeeping (Business, TS 1000)
- Machine Language Nit-Pick (Programming, ZX80, ZX81)

- Word Processor (Word Processing, TS 1000)

CUTS Co

Mamaroneck, NY 10543

- ZX81 T-shirt (Clothing)

Cuyahoga Valley Software Works

615 School Ave, Cuyahoga Falls, OH 44221

Owner: Thomas Simon.

- SPDOS for Oliger (DOS, TS 2068)

Cyberanimation, Inc.

San Jose, CA 95150

- Cyberanimation 1500 Kit (Interfacing, TS 1000)

D A Datasystems

229 Ravenwood Ave., Rochester, NY 14619

D-RAM Products

4352 Grow Road, Stanton, MI 48888

- Mindreader-1 (Games, TS 1000)
- Star Duel (Games, TS 1000)
- Starship Crisis/Planet Quiz (Games, TS 1000)

D. Bruce Electronics

The Beacon Blackhall Rocks, Cleveland England TS27 4BH

- Keyboard Sounder (Keyboard, ZX80, ZX81)
- Tape Recorder Interface (Tape, ZX80, ZX81)
- Video Amplifier Unit (Video, ZX80, ZX81)

D. C. Roberts

8 Sheddingdean Close, Burgess Hill, West Sussex, U.K. RH1 5JQ

- Stocktaker (Finance, TS 1000)

D. Ernst

11 Fairfield St., Montclair, NJ 07042

- Cave of Destiny (Games, TS 1000)

D. Fritsch

6 Stanton Road, Thelwall Warrington, Cheshire, England

- ZX81 Video Inverter (Video, TS 1000)

D. R. Navigation

New York, NY 10044

- Morseman 3 (Math/Science, TS 1000)
- Radiobeacon Qwikplot (Math/Science, TS 1000)

Daedalus Software

8442 Cozycroft, Canoga Park, CA 91306

- Furious (Games, TS 1000)

Dale Lipinski Software

2737 Susquehanna Rd, Roslyn, PA 19001

- Check (Home, TS 1000)
- Inex (Business, TS 1000)
- Inven (Business, TS 1000)
- Ledger (Business, TS 1000)
- List (Database, TS 1000)
- Stock (Business, TS 1000)
- Tutor (Education, TS 1000, TS 2068)

DAMCO Enterprises

67 Bradley Ct., Fall River, MA 02720

- Rainbow plus Interface (Emulator, TS 2068)
- Rotronics Wafadrive (Disk Drive Systems, TS 2068)
- Rotronics Wafer (Cassettes, TS 2068)

Dancer

9850 Metro Parkway West, Phoenix, AZ 85021

- 16-32-48K expanda RAM (RAM, TS 1000)

Data Services

213 34th Street, West Des Moines, IA 50265

Produced software for audiologists, using the Berger Prescription Hearing Aid Fitting System.

- Berger Prescription Hearing Aid Fitting System (Business, TS 1000)

Companies

Data-assette

56 South 3rd St, Oxford, PA 19363

- Airline (Games, TS 1000)
- Alien Intruder, Hieroglyphics (Games, TS 1000)
- ASCOM (Terminal, ZX81, TS 1000)
- Autochef (Games, TS 1000)
- Basic Business I (Business, TS 1000)
- Cash Flow Forecaster and Budget Analysis (Business, TS 1000)
- Dallas (Games, TS 1000)
- Dates (Home, TS 1000)
- Finance I (Home, TS 1000)
- Gobble (Games, TS 1000)
- Great Britain Ltd (Games, TS 1000)
- Great Western (Games, TS 1000)
- Home Plan I (Home, TS 1000)
- Inventory Control (Business, TS 1000)
- Jigsaw Executive Keyboard (Keyboard, TS 1000)
- KLIK-2 (Keyboard, TS 1000)
- Micro-Music (Music/Speech, TS 1000)
- Power Supply (Power, TS 1000)
- Print Shop (Games, TS 1000)
- Property Manager (Business, TS 1000)
- Rampage (Games, TS 1000)
- Roulette (Games, TS 1000)
- Time Trippers (Bandits) (Games, TS 1000)
- Volcanic Dungeon/Hangman (Games, TS 1000)
- Wumpus Adventure/Movie Mogul (Games, TS 1000)
- X-Word ZX101 (Word Processing, TS 1000)
- ZX Compiler (Programming, TS 1000)
- ZX-21 Metered Cassette Interface (Tape, TS 1000)
- ZX-22 Powered Cassette Interface (Tape, TS 1000)
- ZX-98 Parallel and Serial Interface (Printer, RS232, TS 1000)
- ZX-99 Tape Control (Tape, TS 1000)
- ZX-99 Text (Word Processing, TS 1000)
- ZX-Panda (RAM, TS 1000)
- ZX-Panda Expansion Module (RAM, TS 1000)

Data-Share

Modesto, CA 95351

Companies

Datacon Corporation

Flossmoor, IL 60422

Datacon produced software for main-frame computers, producing programs that integrate with and update each other within the databases of corporations and government installations.

Their integrated software for the TS 1000 could save data to tape, without the program, allowing for data exchange across programs. For example, the Mega-Plot program can read data from the Mega-Calc data tape and produce graphic illustrations of your spreadsheet data. The Mega-Earn program can read Mega-Bill data tape and post the accounts receivable information

Programs in the Mega-Master and Mega-Wealth groups could read/write files across the series. The Mega Home group consisted of 3 non-integrating programs.

- Mega 2068 Software (Business, TS 2068)
- Mega Software (Business, TS 1000)
- Mega-Bill (Business, TS 1000)
- Mega-Calc (Spreadsheet, TS 1000)
- Mega-Desk (Software, TS 1000)
- Mega-Doc (Word Processing, TS 1000)
- Mega-Earn (Business, TS 1000)
- Mega-File (Database, TS 1000)
- Mega-Lex (Word Processing, TS 1000)
- Mega-Mail (Terminal, TS 1000)
- Mega-Net (Business, TS 1000)
- Mega-Pay (Business, TS 1000)
- Mega-Plan (Home, TS 1000)
- Mega-Plot (Graphics, TS 1000)
- Mega-Probe (Home, TS 1000)
- Mega-Stat (Math/Science, TS 1000)
- Mega-Stock (Business, TS 1000)

Datametrics

Trout Rd., West Drayton Middlesex, U.K.

- ZX81 Dust/Dirt Cover (Accessory, TS 1000)

DataQuester

- Personal Computer Software for Timex-Sinclair 1000 (Miscellaneous, TS 1000)

Dave Franson

3534A E. Squire Ave., Cudahy, WI 53110

- Extended Paint (Art, TS 2068)

David B. Scollin

350 Laughlin Way, Redwood Valley, CA 95470

- Masterbrain (Games, TS 1000)

David Spellman

Provo, UT 84603

- Wizard’s Castle (Games, TS 1000)

Daw Software

78 Aberdeen Pl., Clayton, MO 63105

- Maze (Games, TS 1000)
- Medieval Fantasy (Games, TS 1000)

Daydesign

790 E. Big Beaver Rd., Troy, MI 48084

- Big-Key Legends (Keyboard, TS 1000)
- My Type (Education, TS 1000)

DCP Microdevelopments Ltd.

Bryon Court, Bow Street, Great Ellingham, Norfolk NR17 1JB United Kingdom

DCP Microdevelopments website.

- DCP Interspec Pack (Interfacing, TS 1000, TS 2068, ZX Spectrum)
- DCP P/A/C Packs (Interfacing, TS 1000)
- DCP Speech Pack (Sound/Speech, TS 1000)

Del Products, Inc.

13512 Keating St., Rockville, MD 20853

- Cryptography Software (Miscellaneous, TS 1000)

Delphic Enterprises

5618 Martinique Dr., Corpus Cristi, TX 78411

- 4K Toolkit (ROM, TS 1000)

Delta Technical Services, Inc.

565-9th St, Brooklyn, NY 11215

Advertised TS 1000 memory map in Computers & Electronics.

Dem Co.

211 Nature Trail, Chapel Hill, NC 27514

- Maze (Games, TS 1000)

Dennis Donovan

3125 Park Ave, Bronx, NY 10451

- Cosmic Galaxian Arcade (Games, TS 1000)

Dennis Weber

Troutman, NC 28166

- Add on RAM for ZX80 instructions (RAM, ZX80)

Dennis Young

7833 Rolling Hills Dr., Jacksonville, FL 32205

- Space Cruise (Games, TS 1000)

Detron of Hawaii

2007 Naio St., Honolulu, HI 96817

Inexpensive programs for the ZX80 and ZX81.

Diana Rowland

97 Essex Ave., Montclair, NJ 07042

- Quiz Grader (Education, ZX81, TS 1000)
- Super Grader (Education, TS 1000)
- Test Grader (Education, TS 1000)
- Test Grader with Grade-System Option (Education, TS 1000)
- Test Grader with Group Printout (Education, TS 1000)

Digital Integration

22 Ash Church Rd, Aldershot, Hampshire United Kingdom

- Night Gunner (Games, TS 1000)
- Night Gunner (Games, TS 2068)
- ZX81 High Resolution Graphics Pack (Graphics, TS 1000)

Dile Assoc

Allen, TX 75002

Discount Software, Inc.

320 E. 59th St., New York, NY 10022

- Assembler (Programming, TS 1000)
- Bookkeeping (Business, TS 1000)
- Compiler (Programming, TS 1000)
- Disassembler (Programming, TS 1000)

Companies

- DonkeyKong (Games, TS 1000)
- Financial Analyzer (Finance, TS 1000)
- Graph (Utilities, TS 1000)
- Leap Frog (Games, TS 1000)
- Mailing List (Business, TS 1000)
- Programmers Aid (Programming, TS 1000)
- Quick Load (Utilities, TS 1000)
- Quizzer (Games, TS 1000)
- Star Voyage (Games, TS 1000)

DK’tronics

23 Sussex Rd, Gorleston, Great Yarmouth, Norfolk, England

- 16K RAM (internal) (RAM, TS 1000)
- 16K RAM Pack (RAM, TS 1000)
- 2K RAM Pack (RAM, ZX80, ZX81, TS 1000)
- 4K High Resolution Graphics ROM (Graphics, TS 1000)
- 4K RAM Pack (RAM, ZX80, ZX81, TS 1000)
- 64K RAM (internal) (RAM, ZX81)
- 64K RAM Pack (RAM, TS 1000)
- 8K RAM pack (RAM, TS 1000)
- Asteroids (Games, TS 1000)
- Centipede (Games, TS 1000)
- Defender (Games, TS 1000)
- dk Keyboard (Keyboard, TS 1000)
- Games Player Joystick Interface (Joystick, TS 2068)
- Light Pen (Miscellaneous, TS 2000, TS 2068)
- Space Invaders (Games, TS 1000)
- Speech Synthesizer and Amplifier (Sound/Speech, TS 2068)
- Three Channel Sound System (Sound/Speech, TS 2068)

DML Software

14 Wick Rd., E. Brunswick, NJ 08816

Owner: D. LaBue

- Gene-Pro (Home, TS 1000)

DO LOOPS Computer

209 Maple Ave, Harleysville, PA 19438

- TSPlus (Miscellaneous, TS 1000)

Companies

Dolphin Computer

Redwood City, CA 94064

- 16K RAM Pack (RAM, TS 1000)
- 64K RAM Pack (RAM, TS 1000)

Domino Cubes

355 W 39th St, New York, NY 10018

Mike Fink sold the Cambridge Z88 and supported Z88 users through his company.

Doran Engineering, P.A.

113 South Chestnut St., Pleasantville, NJ 08232

Later changed to Utilities Engineering.

- Steel Beam Design (Math/Science, TS 1000)
- Timber Beam Design (Math/Science, TS 1000)

Double H Electronics

195 Leilani, San Antonio, TX 78242

- Double “H” Keyboard (Keyboard, ZX80, TS 1000)
- Keypad (Keyboard, ZX80, MicroAce, ZX81, TS 1000)

Down East Computers

Greenville, NC 27834

Founded by Alger Salt, Down East produced the VOTEM, one of the earliest analog to digital devices for Sinclair computers.

- VOTEM (Interfacing, ZX80, ZX81, TS 1000, TS 2068)

Downsway Electronic Ltd

Downsway House, Epsom Road, Surrey United Kingdom

- Downsway 16K RAM Pack (RAM, TS 1000)
- Downsway 64K Memory (RAM, TS 1000)

Drivers Software Source-books

5040 Ocotillo Rd., Los Cruces, NM 88001

DRRP Software

Peabody, MA 01960

- 4 8K, 1K BASIC Programs (Miscellaneous, TS 1000)
- Hebrew Tutor (Education, TS 1000)
- Proverbs (Education, TS 1000)

DSBC

Dolan Springs, AZ 86441

- Home Accounting (Home, TS 1000)
- Math Tutor (Education, TS 1000)
- Programs for the Basic (2K) ZX81/TS1000 (Miscellaneous, TS 1000)
- Star Venture (Games, TS 1000)

Dunrobin Software

37 Rivaldsgreen Crescent, Linlithgow Scotland UK

- Brainteasers (Games, TS 1000)
- Rubber Bridge Scorepad (Games, TS 1000)

Dynabyte

Michigan City, IN 46360

- Artificial Intelligence Program (Games, TS 1000)

Dynacomp, Inc.

1427 Monroe Ave, Rochester, NY 14618

- Blackjack (Games, TS 1000)
- Checkbook (Home, TS 1000)
- Data Filer (Business, TS 1000)
- Graphics Drawer (Graphics, TS 1000)
- Phone Book (Home, TS 1000)
- Pixel Drawer (Graphics, TS 1000)
- Tic-Tac-Toe (Games, TS 1000)
- Word Scramble (Games, TS 1000)

Dynamic Designs

Norco, CA 91760

- Control Module (Power, TS 1000)
- Reset Control (Miscellaneous, TS 1000)

E & S Software

Budd Lake, NJ 07828

- B-29 Bomber (Games, TS 1000)
- Checkbook (Home, TS 1000)
- Earthquake (Games, TS 1000)
- Hiding (Games, TS 1000)
- The File Developer (Database, TS 1000)

- The Organizer (Database, TS 1000)
- Tunnels (Games, TS 1000)

E-Z Key

711 Southern Artery, Quincy, MA 02169

Founded by a member of the Sinclair/ Timex User Group of the Boston Computer Society.

- E-Z Key 40 (Keyboard, TS 1000)
- E-Z Key 44 (Keyboard, TS 1000)
- E-Z Key 60 (Keyboard, ZX80, TS 1000)
- EC-11 Custom Enclosure (Keyboard, TS 1000)
- EC-14 Custom Enclosure (Keyboard, TS 1000)
- Joystick (Joystick, TS 1000)
- Keyboard Interfaces KBD-1 and KBD-2 (Keyboard, TS 1000, TS 2068)
- Upload 2000 (Miscellaneous, TS 2068)

E. Alvarez

Oviedo, FL 32765

Owner: Gene Alvarez.

E. Arthur Brown Company

3404 Pawnee Drive, Alexandria, MN 56308

- Microdrives (Disk Drive Systems, TS 2068)
- MKIV Keyboard (Keyboard, TS 1000)
- MKIV Modem (RS232, TS 1000)

E. H. Enterprises

Little Rock, AR 72214

Owner: Elwyn Hickam

- “Peel and Stick” Keys (Keyboard, TS 1000)

E. McGhee

10127 121 St, Edmonton, Alberta Canada T5N 3X1

Specialized in Spectrum software for the TS 2068 with a Spectrum ROM.

Companies

Earl W. Powers Associates

502 Berland Way, Chula Vista, CA 92011

- Secure Portable Unit (Accessory, TS 1000)

Earthscenes

Columbus, OH 43221

- Softwear (Clothing)

East London Robotics

Finlandia House, 14 Darwell Close, London E6 4BT

- The Incremental 1.1 (RAM, TS 1000)

EconoTech

30 Brockenhurst Way, London, United Kingdom

- Econo Tech 16K RAM Pack (RAM, TS 1000)

Ed Grey Enterprises

Inglewood, CA 90305

Also ran The Grey Matter BBS.

- Loader V (Terminal, TS 2068)
- PIX-FX (Art, Graphics, TS 2068)
- Specterm-64 (Terminal, TS 2068)
- Z-SI/O RS-232 Interface (RS232, TS 2068)

Edson Electronics

Tampa, FL 33684

- Cassette loading monitor (Tape, TS 1000)
- Elementary School Package (Education, TS 1000)

Edward W. Loxterkamp

249 W. Dayton-Yellow Springs, Fairborn, OH 45324

- Interface to the Real World (RS232, TS 1000)

ELCOMP Publishing, Inc.

53 Red Rock Ln., Pomona, CA 91766

- I/O Board (Interfacing, TS 2068, ZX Spectrum)
- Machine Language Monitor (Programming, TS 1000)
- Mailing List (Business, TS 1000)

Companies

Electret Scientific Company

Star City, WV 26505
Owner: Oleg D. Jefimenko

- Musician Royal (Music/Speech, TS 2068)

Electro Research

Columbus, OH 43212
• EZ-Filter (Math/Science, TS 1000)
• Phone/Address List (Home, TS 1000)
• Super File (Database, TS 1000)

Electronic Technology Today Inc.

Massapequa Park, NY 11762
Imported books published by Bernard Babani Books.

Emvee Software

10 Mythrop Rd., Lytham, Lancashire U.K. FY8 4JD
• Mini-Cricket (Games, TS 1000)
• Mini-Golf (Games, TS 1000)
• Mini-Manufacturing (Games, TS 1000)

Ener-Z

Fort Washington, PA 19034
• Report Generator (Interfacing, TS 1000)

English Micro Connection

15 Kilburn Ct., Newport, RI 02840
Owner: Bob Dyl.

• Brian Bloodaxe (Games, TS 2068, ZX Spectrum)
• Cauldron (Games, TS 2068, ZX Spectrum)
• Doomdark’s Revenge (Games, TS 2068, ZX Spectrum)
• Gremlins (Games, TS 2068, ZX Spectrum)
• Lords of Midnight (Games, TS 2068, ZX Spectrum)
• Shadowfire (Games, TS 2068, ZX Spectrum)
• Starion (Games, TS 2068, ZX Spectrum)
• Word Manager (Word Processing, TS 2068, ZX Spectrum)

Enter Lingua

206 James St., Carrboro, NC 27510
Owned by Douglas Dewey, a member of the Triangle User Group.

- EMU-1 Spectrum Emulator (Emulator, TS 2068)
- EMU-2 Spectrum Emulator (Emulator, TS 2068)

Ephemeris V

Winchester, KY 40391
• Ephemeris V (Math/Science, TS 1000)

EPROM Services

3 Wedgewood Dr., Roundhay, Leeds UK
• 8K EPROM Board (ROM, TS 1000)
• Graphics Generator (Graphics, TS 1000)
• I/O Board (Interfacing, TS 1000)

Eric Beckett

Milwaukee, WI 53223
• Joystick Instructions (Joystick, TS 1000)

Eric Yruegas

4708 Langley Ave, Whitehall, OH 43213
• Record Keeping (Home, TS 1000)

Eugene Bock, Associates

135 Heartwood Dr., Lansdale, PA 19446
• Tax Program (Finance, TS 1000)

Eugene Pererva

308 Railroad Ave, Bridgeport, CT 06604
Offered conversion service, migrating data and programs from TS 2068 to QL.

Eugene Zweig

Pearl River, NY 10965
• EZ Assembler and Editor (Programming, TS 1000)

Evansoft

1246 Elmwood, Evanston, IL 6020
• First Marathon Training Planner (Miscellaneous, TS 1000)

- Music Theory/Ear Training (Music/Speech, TS 1000)
- Pace and Splits Calculator (Miscellaneous, TS 1000)
- Runner’s Log (Miscellaneous, TS 1000)
- Training Program (Miscellaneous, TS 1000)

Event Horizon Software

2345 Northfield, Trenton, MI 48183
• Masterminds (Games, TS 1000)
• Stor-A-Lot (Database, TS 1000)
• ZX Star-Trip (Games, TS 1000)

Executive Workshop

7420 S.E. Woodstock Blvd., Portland, OR 97206
• Accounts Payable/Receivable (Business, TS 1000)
• Break-Even Analysis (Business, TS 1000)
• Customer/Supplier File (Business, TS 1000)
• Depreciation Schedule (Business, TS 1000)
• Executive Clue (Games, TS 2068)
• Expected Value Computation (Business, TS 1000)
• Financial Package (Business, TS 1000)
• Financial Ratio Analysis (Business, TS 1000)
• Pricing Programs (Business, TS 1000)
• Pro Football Forecast (Games, TS 1000)
• Sales Trend Analysis (Business, TS 1000)
• Straits of Hormuz (Games, TS 2068)
• Ultimate Forecast, The (Games, TS 1000)

Expense Cutter Products, Inc.

Raytown, MO 64133
• Crash Guard (Accessory, TS 1000)

EZRA GROUP II

San Diego, CA 92105
• 4X Characters (Programming, TS 1000)
• 4x Sideways Billboard (Miscellaneous, TS 1000)
• 8K ROM Character Generator (Programming, ZX81, TS 1000)

Companies

- 8X Characters (Programming, ZX81, TS 1000)
- 8x Sideways Billboard (Miscellaneous, TS 1000)
- Addition (Education, ZX81, TS 1000)
- Asteroid (Games, ZX81, TS 1000)
- BASIC Keyword Demos (Education, ZX81, TS 1000)
- Bell Curve Generator (Education, ZX81, TS 1000)
- Biorhythms (Games, ZX81, TS 1000)
- Block Painter (Art, ZX81, TS 1000)
- Block Pattern Generator (Art, TS 1000)
- Card Cut (Games, ZX81, TS 1000)
- Cayley’s Sextant (Education, ZX81, TS 1000)
- Character Generator Demos (Graphics, ZX81, TS 1000)
- Chewter (Games, ZX81, TS 1000)
- Course in Hypercube Theory (Education, TS 1000)
- Does Nothing Program (Miscellaneous, ZX81, TS 1000)
- Dog Race (Games, ZX81, TS 1000)
- Dog Races (Games, ZX81, TS 1000)
- Ellipses and Circles (Programming, ZX81, TS 1000)
- Equational and/or Touchstone (Education, ZX81, TS 1000)
- Graphics Billboard (Miscellaneous, ZX81, TS 1000)
- Graphics/Moving Billboard (Miscellaneous, ZX81, TS 1000)
- Hamilton Display (Math/Science, TS 1000)
- Hamilton Path Generator (Math/Science, TS 1000)
- Hexal Pattern Generator (Art, TS 1000)
- Horse Race (Games, ZX81, TS 1000)
- Hyperbolic Spiral (Math/Science, ZX81, TS 1000)
- Hypercycloids (Math/Science, ZX81, TS 1000)
- Improved Slow Pause (Utilities, ZX81)
- Island Squares (Games, TS 1000)
- Laser Wars (Games, ZX81, TS 1000)
- Lemniscate of Bernoulli (Math/Science, ZX81, TS 1000)
- Limacons (Math/Science, ZX81, TS 1000)

Companies

- Linear Programming (Math/Science, ZX81, TS 1000)
- Linear Regression (Math/Science, ZX81, TS 1000)
- Lissajous Figures (Math/Science, ZX81, TS 1000)
- Long Division (Education, ZX81, TS 1000)
- Magic Cube Generator (Math/Science, TS 1000)
- Make Math (Education, ZX81, TS 1000)
- Mysterious Matrix (Graphics, TS 1000)
- News Bulletin Board (Home, ZX81, TS 1000)
- O-Bliterat & Dire Straits (Games, ZX81, TS 1000)
- Oblique Painter (Art, ZX81, TS 1000)
- Plot Painter (Art, ZX81, TS 1000)
- Plotting Work Sheet (Graphics, ZX81, TS 1000)
- Plotting Work Sheet SLOW (Graphics, TS 1000)
- Prime Numbers (Math/Science, ZX81, TS 1000)
- Quilter (Art, ZX81, TS 1000)
- Random Fences (Graphics, TS 1000)
- Random MUSIC! (Music/Speech, ZX81, TS 1000)
- Rhodonea (Rose) Curve (Math/Science, ZX81, TS 1000)
- Roulette Wheel (Games, ZX81, TS 1000)
- Screen Painter (Art, ZX81, TS 1000)
- Semaphore (Games, TS 1000)
- Serious Cryptology (Games, ZX81, TS 1000)
- Shootist (Games, ZX81, TS 1000)
- Skew-a-Sketch (Art, ZX81, TS 1000)
- Space General (Games, ZX81, TS 1000)
- Space Gunner (Games, ZX81, TS 1000)
- Spinner (Games, ZX81, TS 1000)
- Spiral of Archimedes (Math/Science, TS 1000)
- Split-A-Stack (Games, ZX81, TS 1000)
- Subtraction (Education, ZX81, TS 1000)
- Tap Writer (Miscellaneous, ZX81, TS 1000)
- Times Tables (Education, TS 1000)
- Tower Billboard (Miscellaneous, ZX81, TS 1000)
- Truth Value Programming (Education, ZX81, TS 1000)

- World’s Most Magic Square (Math/ Science, ZX81, TS 1000)
- F. A. Burr**
1603 Ridgeway Ave., Willow Grove, PA 19090
- Synk-Snake (Games, TS 1000)

F/22 Press
Leonía, NJ 07605

- Darkstar (Miscellaneous, TS 1000)

Falmouth Computer Service
255 Falmouth Rd., Falmouth, ME 04105

- Vu-File (2068) patch (Miscellaneous, TS 2068)

Felix Software
19 Leighton Ave, Pinner England HA5 3BW

- The Tomb of Dracula (Games, TS 1000)

Filesixty
25 Chippenham Mews, London, England W9 2AN

US address 37 Fruehauf St., Buffalo, NY 14226 in mid-1983, same address as Cascade Software.

- Buttonset (Keyboard, ZX81, TS 1000)

Finesoft
504 S. Beach, Anaheim, CA 92804

- Graphics Software (Graphics, TS 1000)

Fisher-Marriott Software
90 Abbey Hill, Kenilworth, Warwickshire, U.K. CV8 1LW

Fisher-Marriott Software was started by two teachers with Sinclair ZX81 computers.

- Alphabet (Education, TS 1000)
- Bigspell (Education, TS 1000)
- Bomber (Education, TS 1000)
- The Count (Education, TS 1000)
- Wordplay 1 (Education, TS 1000)
- Wordplay 2 (Education, TS 1000)

Companies

Foundation Systems
17620 26 Mile Rd, Washington, MI 48094

Was previously known as Ramex International.

Fourth Design, The
Niagara Falls, NY 14302

- Support for 16K RAM Pack (Accessory, TS 1000)

Frank Lockhart
Shelby, NC 28150

Frank was a design engineer who wrote software that drew on his 25 years of experience at E. I. DuPont, Western Electric, IBM, Duracell and more.

- Balance (Math/Science, TS 1000, TS 2068, QL)
- BASIC Renumber (Programming, TS 2068)
- Belt and Chain Drives (Math/Science, TS 1000, TS 2068, QL)
- Chord/Curve (Math/Science, TS 1000, TS 2068, QL)
- Conversions/Functions (Math/Science, TS 2068, QL)
- Game Board (Games, TS 2068)
- Graphics Designer (Graphics, TS 2068)
- Guess the Number (Games, TS 2068)
- Levers (Math/Science, TS 2068, QL)
- Math UDGs (Graphics, TS 2068)
- Oblique Trigonometry (Math/Science, TS 2068, QL)
- Pulleys and Wheels (Math/Science, TS 2068, QL)
- Spur Gear Drives (Math/Science, TS 1000, TS 2068, QL)
- State Capitols (Games, TS 2068)
- Terror from Mars (Games, TS 2068)
- Trigonometry (Math/Science, TS 1000, TS 2068, QL)
- Weight Calculations (Math/Science, TS 2068, QL)
- Wire and Metal Rod (Math/Science, TS 2068, QL)

Flint Data Systems
146-22 Delaware Ave, Flushing, BY 11355

- Gobble! (Games, ZX81, TS 1000)

Florida Creations
Jacksonville, FL 32245

- Arcade Games Package (Games, TS 1000)
- Business Depreciation (Finance, ZX81, TS 1000)
- Christmas Party Package (Miscellaneous, ZX81, TS 1000)
- Fun and Games Package (Games, ZX81, TS 1000)
- Home Financial Package (Home, ZX81, TS 1000)
- Las Vegas Package (Games, TS 1000)
- Lucky 7 Slot Machine (Games, TS 1000)
- Madame Ruby (Games, TS 1000)
- Music/Sounds on the Radio (Music/ Speech, ZX81, TS 1000)
- Vegas 21 Blackjack (Games, TS 1000)

Foote Software
Gainesville, FL 32604

Owned by Joseph Williamson.

- Advanced Math (Math/Science, TS 1000, TS 2068)
- Badgammon (Games, TS 2068)
- Calorie Counter (Home, TS 1000, TS 2068)
- CHR\$ (Graphics, TS 2068)
- FootePrint (Printer, TS 2068)
- Hangman & Tic-Tac-Toe (Games, TS 1000)
- U.S.A. (Education, TS 1000, TS 2068)

Forth Dimension
1451 Union St., Middletown, PA 17057

Also known as The Fourth Dimension and Stratos Corporation. Not only did they share the same address; the only thing that differed between their two ads in November/December 1982 issue of Sync was the name of the company.

Companies

Fresh Tracks

27A W. Rayburn Road, Millington, NJ 07946

Software publisher that advertised for new programs.

Friendly Computer

Wallingford, PA 19086

- Draw and Recall (Graphics, TS 1000)
- Graphics charts for Timex/Sinclair (Paper products, TS 1000)
- Strip Poker (Games, TS 1000)
- Trig Teacher (Education, TS 1000)

Frog Software

Glenmont, NY 12077

- 10 Programs (Games, ZX81, TS 1000)
- Artificial Intelligence Telephone Book (Home, TS 1000)
- Centipede (Games, TS 1000)
- data-base 2x (Database, TS 1000)
- Etch-A-Sketch II (Graphics, ZX81, TS 1000)
- Five Video Games (Games, TS 1000)
- Keyboard Overlay (Keyboard, ZX80, TS 1000)
- Personal Computing Package (Miscellaneous, TS 1000)
- Pitfall Fred (Games, ZX81, TS 1000)
- S-Invaders (Games, ZX81, TS 1000)
- Sinclair Destroyer (Games, TS 1000)
- Slots (Games, ZX81, TS 1000)
- SYNCZX (Miscellaneous, TS 1000)

Fulcrum Products

Hillside Steep Lane, W. Sussex UK

- Keyboard Bleeper (Keyboard, TS 1000)
- Loading Aid (Tape, TS 1000)
- Reset Button (Miscellaneous, TS 1000)
- T-shirt: Sinclair ZX81 (Accessory)

Full Spectrum, The

3829 Mainsail Circle, Westlake Village, CA 91361

Fred Kern.

- Keyboard Enclosure (Keyboard, TS 1000)
- Professional Keyboard (Keyboard, TS 1000)

Fuller Micro Systems

Sandfield Park East, Liverpool, England L12 9HP

Also known as Fuller Designs, Ltd.

- FD 81 Keyboard (Keyboard, TS 1000)
- FD System 42 (Keyboard, TS 1000)
- FD System Motherboard (Miscellaneous, TS 1000)
- FD16K RAM (RAM, TS 1000)
- FD64K RAM (RAM, TS 1000)
- Programmable Sound Generator (Sound/Speech, TS 1000)
- PSU 9v 2 amp (Power, TS 1000)
- RAM Adaptor Board (RAM, TS 1000)

Fun-Tech Software

150 S. Hilsenbeck Rd, Pierson, FL 32080

- Kitchen Master (Home, TS 1000)
- Phrase Challenge (Education, TS 1000)
- States and Capitals (Education, TS 1000)
- Word Guesser (Education, TS 1000)

Funware

7119 Santa Fe Ave., Dallas, TX 75223

- Huntman (Games, TS 1000)
- Land the Space Shuttle (Games, TS 1000)
- Land/Air Battle (Games, TS 1000)
- Space Battle (Games, TS 1000)

Fusion Micro Products

Stamford, CT 06901

- Random Scramble (Games, TS 1000)

FWD Computing

Mexico, IN 46958

Supplier of Timex/Sinclair hardware and software. Run by Frank and Carol Davis. The Davises also published Update.

G. E. Topp

Klamath, CA 95548

G. Russell Electronics

Centre Hall, PA 16828

Bill Russell, leader of the Central Pennsylvania Timex/Sinclair Computer Users Group, founded G. Russell Electronics. It

was is named after his wife, who did all the marketing.

He unexpectedly landed in the electronics business when he creating the Winky Board. The passive device plugs into the cassette tape recorder to produce easier tape loading. It also has other functions, such as a tape duplicating capability and an earphone eavesdropper.

The users group in Pennsylvania developed other products that were marketed by G. Russell.

- Chroma-Soft (Graphics, ZX81, TS 1000, TS 1500)
- Comp-Cooler (Miscellaneous, TS 1000)
- Fortyniner (Games, ZX81, TS 1000, TS 1500)
- Gamesmate (Joystick, TS 2068)
- Hi Res Graphics Plans (Graphics, TS 1000)
- Hi Res Printer Graphics (Graphics, TS 1000)
- Key Load (Utilities, TS 1000)
- Rocketman (Games, ZX81, TS 1000, TS 1500)
- ROMFIX (Emulator, TS 2068)
- ROMSWITCH (Emulator, TS 2068)
- Spectrum Hardware Adapter Interface (Interfacing, TS 2068)
- Winky Board (Tape, TS 1000)
- Winky Board 2 (Tape, TS 1000)
- Winky Board 2000 (Tape, TS 1000, TS 2068)
- ZXtricator (Games, ZX81, TS 1000, TS 1500)

Game Room, The

N. Hollywood, CA 91616

William Mims.

- 1 Arm Bandit (Games, TS 1000)
- 7 Games Pack (Games, ZX81, TS 1000)
- CartoonMaker (Art, ZX81, TS 1000)
- CartoonMaker 16 (Art, TS 1000)
- Crosswise (Miscellaneous, TS 1000)
- Gunfighter (Games, ZX81, TS 1000)
- Showdown (Games, TS 1000)
- Word-Hunt (Games, ZX81, TS 1000)

Companies

Games to Learn By, Inc.

Williamsburg, MA 0196

Owned by David Dubay and Charles Warner. Marty Warner-Dubay, a former Timex software engineer, joined after leaving Timex.

The company listed two addresses: one for David Dubay in Connecticut, the other for Charles Warner, in Massachusetts.

- Aegean Voyage (Education, TS 2068)
- Alphabet Zoo (Education, TS 2068)
- Amortization Pack (Finance, TS 2068)
- Art for All Ages (Art, TS 2068)
- Art for Kids (Art, TS 2068)
- Budget Minder (Home, TS 2068)
- Coin Collector (Miscellaneous, TS 2068)
- Executive's Calendar (Business, TS 2068)
- Finance Planner (Finance, TS 2068)
- Game Bag for Kids (Games, TS 2068)
- Generals (Games)
- Logic Levels (Education, TS 2068)
- Lost Island (Games, TS 2068)
- Making Change (Education, TS 2068)
- Mystery Manor (Games, TS 2068)
- Number Tumblers (Education, TS 2068)
- Nursery Songs (Games)
- Payroll (Business, TS 2068)
- Stamp Collector (Miscellaneous, TS 2068)
- T.V. Trivia (Games)
- The Crown (Games, TS 2068)
- Up & Add 'Em (Education, TS 2068)
- Utility 1 (Utilities, TS 2068)
- Utility 2 (Utilities, TS 2068)
- Utility 3 (Utilities, TS 2068)
- Wild Words (Games)
- Zapamoley (Games, TS 2068)

Ganhart/EARTHings

115 N. Rocky River Drive, Berea, Ohio 44017

- Typex/81 Keyboard Overlay (Keyboard, ZX80, TS 1000)

Gary Kemper

751 E. Linfield St., Azusa, CA 91702

- Security Plus (Miscellaneous, TS 1000)

Companies

GCM Electronics, Inc.

Ft. Smith, AR 72906

- IOC24 (Interfacing, TS 1000)

General Systems Consulting

2312 Rolling Rock Dr., Conley, GA 30027

- Amortizations (Business, TS 1000)
- Annuity Evaluation (Business, TS 1000)
- Bank Statement Balancer (Business, TS 1000)
- Bar Charts (Business, TS 1000)
- Checkbook Simulator (Business, TS 1000)
- Depreciation (ACRS) (Business, TS 1000)
- Depreciation Declining Balance (Business, TS 1000)
- Depreciation Straight Line (Business, TS 1000)
- Diet Plan (Home, TS 1000)
- File Manager (Business, TS 1000)
- Home Budget (Home, TS 1000)
- Home Equity Evaluation (Home, TS 1000)
- Home Inventory (Home, TS 1000)
- Home Payables (Home, TS 1000)
- Income Tax Projections (Finance, TS 1000)
- IRS 1040 (Long Form) (Home, TS 1000)
- IRS 1040 (Short Form) (Home, TS 1000)
- Real Estate Investing (Business, TS 1000)
- Savings/Investment Analysis (Business, TS 1000)

George Bezushko

Binghamton, NY 13902

- APOD (Business, TS 1000)

George R. Cartron

12824 Claxton Dr., Laurel, MD 20708

- MUSIC (Music/Speech, TS 1000)
- Star Tron (Games, TS 1000)

Gerald “Jerry” Bennett

148 Carling Ct., San Jose, CA 95111

- Baseball (Games, TS 1000)

Gerton Lunter

Groningen, Netherlands

Developed DOS and Windows-based Spectrum Emulator.

Gesang Associates

Randallstown, MD 21133

Gesso Products

3436 Bay Road, Redwood City, CA 94063

Owner: Bob Orrfelt.

- Cartridge Board (Miscellaneous, TS 2068)
- Dock It (Miscellaneous, TS 2068)
- rWP32 (Word Processing, TS 2068)

GF&B Data Research

1405 Krameria St, Denver, CO 80220

- Computurf #1 (Games, TS 1000)

Gibson Data Services

9 Orchard Drive, Durham, NH 03824

- The Bookkeeper (Business, TS 1000, TS 2068)

Gladstone Electronics

1585 Kenmore Ave, Buffalo, NY 14217

Gladstone Electronics was headquartered in Toronto, Ontario and had an office in Buffalo, NY.

- 16K RAM Pack (RAM, TS 1000)
- 32K RAM Piggy-Back (RAM, TS 1000)
- 64K RAM Pack (RAM, TS 1000)
- Business Pack I (Business, TS 1000)
- Business Pack II (Business, TS 1000)
- Games Pack 1 (Games, ZX80, ZX81)
- Games Pack 2 (Games, ZX81)
- Games Pack 3 (Games, ZX80, ZX81)
- Games Pack 4 (Games, ZX81)
- Gunfighter/Tic-Tac-Toe/Life (Games, TS 1000)
- Hangman (Games, TS 1000)
- Jigsaw 16K RAM (RAM, TS 1000)
- Jigsaw 32K RAM (RAM, TS 1000)
- Jigsaw 64K RAM (RAM, TS 1000)
- Personal Stock Planning (Finance, TS 1000)
- Pop Star (Games, TS 1000)

- Professional Keyboard (Keyboard, TS 1000)
- Project Scheduler and Proposal Sheet (Business, TS 1000)
- Signals and Morse Codes (Education, TS 1000)
- Star Trek (Games, ZX81)
- Viewtext (Utilities, ZX81)
- ZX Mathematics (Education, TS 1000)

Glassware - D. Glass

Johnson City, TN 37165

- Goldmine (Games, TS 1000)
- Mastermined (Games, TS 1000)
- Spider Case (Games, TS 1000)

Glenwood Studio

12 1/2 N Walnut, Glenwood, IA 51534

- Bookkeeping (Business, TS 1000)
- Inventory (Business, TS 1000)

GO Industries

San Francisco, CA 94133

- Construction Estimator (Business, TS 1000)

Golden Stair, The

141A Dore St, San Francisco, CA 94103

- Chartmak (Graphics, TS 1000)
- Meteor Storm (Games, TS 1000)
- Mountain Raider (Games, TS 1000)
- RPNZL (Programming, TS 1000)
- Schedule (Home, TS 1000)
- The Desperate Herd (Games, TS 1000)
- Turtlart (Programming, TS 1000)

Gordon Young

4616 N. River Rd, Oceanside, CA 92056

- Micro BBS-1 (Terminal, TS 1000)
- WORM (Word Processing, TS 1000)

GOTWALD

Davidsville, PA 13928

- Bon Mot (Games, TS 1000)

Graphicomp

55 York St, Toronto, Ontario, Canada M5J 1R7

Companies

Great Lakes Software

201 Burlington Rd, Valparaiso, IN 46383

Greg Brooks Software, Inc.

Mississauga, ONT Canada L5A 2Z6

- Wrath of Kong (Games, TS 1000)

Greg Keller

6409 S. Boston, Fort Smith, AR 72903

- Artificial Flight Program (Games, TS 1000)

Ground Control

Alfreda Ave., Hullbridge, Essex SS5 6LT United Kingdom

- 16K RAM Pack (RAM, TS 1000)

Group Technology Ltd

Check, VA 24072

- FD-ZX1 Interface Board (Interfacing, TS 1000)

Gulf Micro Electronics

1317 Stratford Ave, Panama City, FL 32404

Originally marketed directly by Bill Jones under his own name, Gulf Micro programs were available through several distributors.

Bill Jones started TS-2068 Up-date.

- Smart Text (Word Processing, TS 2068)
- Smart Text ZX/TS (Word Processing, TS 1000)

H & H Electronics

3379 Route 46, Parsipanny, NJ 07054

- Clean Line Power Supply Regulator (Power, TS 1000)
- Fun & Games (Games, ZX81, TS 1000)
- Memo Board (Home, TS 1000)
- Power Line Control (Power, TS 1000)
- Universal Address List (Business, TS 1000)
- Visi-Load Tape Load Monitor (Tape, TS 1000)

Companies

H & Z Electronics

Madison, WI 53708

- Power Saver 1000 (Power, TS 1000)

H. R. Brady

301 Pine St., Neptune Beach, FL 32233

- The Chemistry Tutor (Education, TS 1000)

Hacksel Electronics

247 Queen St. West, Toronto, Ontario Canada M5V 1Z4

Produced printer interfaces for the Timex/Sinclair 2068. One plugged into the cartridge slot, the other connected to the rear edge connector of the printer.

- 2068 Centronics Printer Interface (Printer, TS 2068)

Hal-Tronix, Inc.

Southgate, MI 48195

Sold surplus electronics and de-labeled TS 1000s liquidated by Timex.

Hale Software/EMSoft

Boston, MA 02114

Owned by Peter Hale.

- Bus Extender (Miscellaneous, ZX80, ZX81, TS 1000, TS 2068)
- CAM MASTER (Math/Science, QL)
- CDIR/BOOTS (Utilities, QL)
- INVENTORY (Business, QL)
- LANDLORDS (Business, TS 1000)
- MAILBAG (Database, QL)
- QLAND_LORD (Business, QL)
- RECIPE (Home, QL)
- TAX-I-QL (Finance, QL)
- text87 (Word Processing, QL)
- TRUST_FUND (Finance, QL)

Hardware, Software, Any-ware

10 Coles St., Brooklyn, NY 11231

Harthun Engineering and Research

Albany, KY 42602

- Adventures in Artificial Intelligence (Games, TS 1000)
- Teach Your ZX80/81 to Talk (Sound/ Speech, TS 1000)
- The Display File Map (Miscellaneous, TS 1000)

Harvard Group, The

Bolton Road, Harvard, MA 01451

Published Syntax magazine.

Haven Hardware

4 Asby Road, Workington, England

- 1-3K Memory Expansion (RAM, ZX80)
- Color Board (Graphics, ZX80)
- Compact Keyboard (Keyboard, ZX80, ZX81, TS 1000)
- Inverse Video Module (Video, TS 1000)
- Keyboard Kit (Keyboard, ZX80)
- Parallel I/O port (Interfacing, ZX80)
- Programmable Character Generator (Graphics, ZX80, TS 1000)
- Repeating Key Module (Keyboard, ZX80, TS 1000)

HAWC Programming

4604 Apple Tree Drive, Alexandria, VA 22310

- LLIST-GP (Utilities, ZX81, TS 1000)
- Talk5 (Miscellaneous, ZX81, TS 1000)
- Timescreen (Utilities, ZX81, TS 1000)

Hawg Wild Software

Little Rock, Arkansas 72217

Owner: Gary Smith.

- 2068 fig-FORTH (Programming, TS 2068)
- MinimUF 3.5 (Math/Science, TS 1000)
- Morse Code (Miscellaneous, TS 1000)
- Spectrum Forth (Programming, TS 2068, ZX Spectrum)
- User Design Graphics toolkit (Graphics, TS 2068)
- XFORTH (Programming, TS 1000)

Haymarket Software Co.

Jacksonville, FL 3231

- Flip-Flop (Games, TS 1000)
- For Adults Only (Games, TS 1000)
- Haymarket Hangman (Games, TS 1000)
- Maze-O-Rama (Games, TS 1000)
- Maze-O-Treasure (Games, TS 1000)
- Party Patterns/Towers of Haymarket (Games, TS 1000)
- Ring of the Goddess, Part 1 (Games, TS 1000)
- Ring of the Goddess, Part 2 (Games, TS 1000)
- Road Race (Games, TS 1000)
- Space Treasures (Games, TS 1000)
- ZX-Black Box (Games, TS 1000)
- ZX-Concentration (Games, TS 1000)

HCS Software

Portsmouth, OH 45662

HD Software

1445 Oldfield Road, Decatur, GA 30030

Owner: William Erickson.

- Coupon Magic (Home, TS 2068)
- Quick File (Database, TS 2068)
- Word Processor (Word Processing, TS 2068)

Heath Computer Services

52 S 950 E, Greentown, IN 49936

- Cash Register (Business, TS 1000)
- Checking (Business, TS 1000)
- Flash Spelling (Education, TS 1000)
- Inventory (Business, TS 1000)
- Mailing List (Business, TS 1000, TS 2068)
- Math Quiz (Education, TS 1000)
- Multiplication Tables (Education, TS 1000)
- Sales File (Business, TS 1000)

Heller Paper Company

2123 E. 38 St., Brooklyn, NY 11234

Hensley & Associates

Asheboro, NC 27203

- African Pilot (Games, TS 1000)

Companies

- Animated Graphics Programming Course (Education, TS 1000)
- Economical Accounting Spreadsheet Program (Spreadsheet, TS 1000)
- Flight Simulation/Airline Management (Games, TS 1000)
- Flight Simulator (Games, TS 1000)

Heuristics

25 Shute Path, Newton, MA 02159

As the ZX-GROUP, Heuristics were exclusive distributors of ZX80/ZX81 technical documentation.

Owner: David Ornstein.

Hewson Consultants

7 Grahame Close, Blewbury, Oxon England OX11 9QE

- Backgammon (Games, TS 1000)
- Bumper Bundle (Education, ZX80, MicroAce)
- Countries of the World (Education, ZX Spectrum)
- Mini Space Intruder (Games, ZX81, TS 1000)
- Nightlite (Games, TS 1000)
- Pilot (Games, TS 1000)
- Puckman (Games, TS 1000)
- Space Intruders (Games, TS 1000)
- Space Intruders (Games, TS 2068, ZX Spectrum)
- Statistics (Math/Science, ZX81, TS 1000)
- Toolkit (Programming, TS 1000)
- Z80 Op Codes (Accessory)

Hilderbay Ltd.

8/10 Parkway, Regents Park, London NW1 7AA United Kingdom

- Critical Path Analysis (Business, TS 1000)
- Inventory Control (Business, TS 1000)
- Test and Alignment Cassette (Tape, TS 1000)
- The Hilderbay Loading Aid (Tape, TS 1000)

Companies

Hilton Computer Services

14 Avalon Rd., Orpington, Kent UK

- Personal Banking System (Home, TS 1000)
- Personal Banking System Bank Reconciliation Module (Home, TS 1000)

HiSoft Systems

Dunstable, Bedfordshire, England

- HiSoft Pascal (Programming, TS 2068)

Hobby Robot

Hazlehurst, GA 31539

- Smart Rabbit (Miscellaneous, TS 1000)

Home Applications

2169 Hikido Dr., San Jose, CA 95131

- Weight-Watcher (Home, TS 1000)

Home Electronics Service

5222 Kazen Dr., San Antonio, TX 78219

Serviced Sinclair and Timex/Sinclair computers as late as 2000.

Horizon Simulations

789 S. Green Bay Rd., Lake Forest, IL 60045

Chris White.

- Adventure to Korvas (Voyager II) (Games, TS 1000)
- Aztec Gold (Games, TS 1000)
- Deathship Sabotage (Games, TS 1000)
- Draw-It (Graphics, TS 1000)
- Explorer I (Games, TS 1000)
- Explorer II (Games, TS 1000)
- Music Machine (Music/Speech, ZX81, TS 1000)
- Quest for the Staff of Light (Games, TS 1000)
- Space Gunner (Games, TS 1000)
- The World of Sangrel (Voyager I) (Games, TS 1000)

Human Engineered Software

71 Park Lane, Brisbane, CA 94005

- 2K Fun Pack (Games, TS 1000)
- 2K Programmer Kit (Programming, TS 1000)
- 2K TREK (Games, TS 1000)

- Budget Master 1000 (Home, TS 1000)
- Reversi 1000 (Games, TS 1000)
- Sabotage (Games, TS 1000)

Hunter Electronics

1630 Forest Hills Dr., Okemos, MI 48864

Owner: Paul Hunter

- Bank Switching and Operating System (BSOS) (DOS, TS 1000)
- Hunter 8K Nonvolatile CMOS RAM/E-PROM (RAM, TS 1000)

Huron Communications

710 S. Silver St., Bad Axe, MI 48413

- Antenna Design (Math/Science, TS 1000)

Huron Valley Research, Inc.

Highland, MI 48031

- Game Changer Interface (Miscellaneous, TS 1000)

Hurricane Electronics Lab

Dolton, IL 60419

- 2 amp Power Supply (Power, TS 1000)
- HL-1205 Power Supply (Power, TS 1000)
- Power Line Filter/Suppressor Module (Power, TS 1000)
- The Arcade Master (Sound/Speech, TS 1000)

Hybridion

614 Linden Hill, Lindenwold, NJ 08021

- LOAN\$ (Business, TS 2068)
- MATMAN (Math/Science, TS 1000, TS 2068)

I. M. S. Enterprises

Lancaster, CA 93539

- Blackjack (Games, TS 1000)
- Calendar Planner (Home, TS 1000)
- Household Bookkeeper (Home, TS 1000)
- Personal Bio-Rhythms (Games, TS 1000)
- Sunrise/Sunset (Math/Science, TS 1000)
- Sync Index (Miscellaneous, TS 1000)

- Your Key Colors Using Numerology (Miscellaneous, TS 1000)

ICS Computer Training

Scranton, PA 18515

- Learn to Use a Computer (Miscellaneous, TS 1500)

Igor Alexeff

Electrical Engineering Dept, Univ of Tennessee, Knoxville, TN 37916

- Cubic/quadratic Solution (Math/Science, TS 1000)

Image Computer Products

615 Academy Drive, Northbrook, IL 60062

Semi-official software supplier in the U.S. for the ZX80.

- Odyssey in Space (Games, ZX80)
- Simulations (Games, ZX80)

Imre Auersbacher

41 King St., Belleville, NJ, 07109

- Astrology (Miscellaneous, TS 1000, TS 2068)
- Astronomy (Math/Science, TS 2068)
- Intermediate Math Pack (Math/Science, TS 1000, TS 2068)
- Math Pack 1 (Education, TS 1000, TS 2068)
- Math Pack 2 (Education, TS 1000, TS 2068)
- The Calculus (Math/Science, TS 1000, TS 2068)
- Weathercaster (Miscellaneous, TS 1000, TS 2068)

Independence Research

Orem, UT 84057

- 64KT/64KZ (RAM, ZX81, TS 1000)
- Internal 16K RAM Expansion (RAM, ZX81)

Indiana Software Group Inc.

4620 Mission Ct. E, Columbus, IN 47203

- Hardwire RAM Pack (RAM, TS 1000)
- On/Off switch (Power, TS 1000)
- Reset switch (Miscellaneous, TS 1000)

Companies

Infinity Research Development

845 Via de la Paz, Los Angeles, CA 90272

- Bouncy (Games, TS 1000)
- Casino/Stockmarket (Games, TS 1000)
- Missile Strike (Games, TS 1000)
- Night Driver (Games, TS 1000)

InfoCenter

4807-16, Lubbock, TX 79416

- Massive.One (Education, TS 1000)

Innovation

16529 Lakeshore Rd., Cleveland, WI 53015

- Innovation 1001 (Keyboard, TS 1000)

Innovision

Los Altos, CA 94022

President: David Thornburg.

David Thornburg worked at Xerox Palo Alto Research Center as a research scientist, on a variety of projects, including the development of user interface devices for the Xerox Alto. His inventions included touch screen technology used in early PDAs and whiteboards.

He co-founded Koala Technologies, which marketed one of his inventions, the KoalaPad graphics tablet.

- PrestoDigitizer (Miscellaneous, ZX80)

INSIGHT

1889 Lewis Dr., Niles, MI 49120

- MX-16 16K RAM (RAM, TS 1000)

Instant Software

73 Pine St, Peterborough, NH 03458

Instant Software produced game, utility, and education software in the late 1970s and early 1980s, primarily for the TRS-80 line of home computers. Instant Software was a subsidiary of Kilobaud Microcomputing, headquartered in Peterborough, New Hampshire and run by Wayne Green.

- Blackjack Master (Games, TS 1000)

Companies

- Geography Explorer: USA (Education, TS 1000)
- Mountain Pilot (Games, TS 1000)
- Teacher (Education, TS 1000)

Integrated Data Systems

30 Brookmount Rd., Toronto, Canada M4L 3N1
Owner: Ian Singer.

Distributor for: Audiograph, Bi-Pak, Bug-Byte, Byte-Back, Data-assette, Dean, Ezra Group II, Graphicomp, HES, Intercomputer, International Publishing and Software, JRS Software, Kayde, Memotech, Oasis Software, Orbyte, R.I.S.T., Simulation, Sinclair, Softsync, Timeworks, Zodex.

- 2068 Emulator Board (Emulator, TS 2068)
- AGF Joystick Interface II (Joystick, TS 1000)
- Asteroids (Games, TS 1000)
- Atomic Configuration (Education, TS 1000)
- Compound Chemistry (Education, TS 1000)
- Diagram Maker (Art, TS 1000)
- EPROM Burner (Miscellaneous, TS 2068)
- Fast Scrolling (Programming, TS 1000)
- French Review (Education, TS 1000)
- Graphics Ladders (Games, TS 1000)
- Highschool French (Education, TS 1000)
- Integral Physics (Education, TS 1000)
- Multiple Regression (Math/Science, TS 1000)
- Power Supply (Power, TS 1000)
- Quiz All (Education, TS 1000)
- Spectrum ROM (ROM, TS 2068)
- Top Secret (Games, TS 1000)

Intellectual Games

193 Peaceable St., Ridgefield, CT 06877
• Othello for 1K (Games, ZX81, TS 1000)

Inter-Pacific Systems Inc.

2091 Carrick St., Victoria, B.C. Canada VSR 2M5
Owner: Craig Bird.

- 25 Machine Code Programs (Utilities, TS 1000)
- Escape (Games, TS 2068)
- High Resolution Graphics (Graphics, TS 1000)
- Word Processor Program (Word Processing, TS 1000)

Intercomputer, Inc.

358 Chestnut Hill Ave, Boston, MA 02146
Irv Frankel, Arman Toorian

- Address Book (Home, TS 1000)
- Air Attack (Games, TS 1000)
- Bill Organizer (Home, TS 1000)
- Check Book (Home, TS 1000)
- Combo Pak I (Games, TS 1000)
- Combo Pak II (Games, TS 1000)
- Combo Pak III (Games, TS 1000)
- Combo Pak IV (Games, TS 1000)
- Data Communications Package (RS232, TS 1000)
- Demolisher (Games, TS 1000)
- Disassembler (Programming, TS 1000)
- Eduventure I (Education, TS 1000)
- Eduventure II (Education, TS 1000)
- Eduventure III (Education, TS 1000)
- Eduventure IV (Education, TS 1000)
- Flexible ribbon connector (Miscellaneous, TS 1000)
- Guard the President (Games, TS 1000)
- Intercontroller (Interfacing, TS 1000)
- Jeopardy (Games, TS 1000)
- Missile Launcher (Games, TS 1000)
- Occasion Calendar (Home, TS 1000)
- Return From Space (Games, TS 1000)
- Softbox (Miscellaneous, TS 1000)
- Softbox Cartridges (ROM, TS 1000)
- Speedload (Tape, TS 1000, TS 1500)
- Statistics Programs (Math/Science, TS 1000)
- Stopper (Utilities, TS 1000)
- Submarine (Games, TS 1000)
- Vegas (Games, TS 1000)

Interface Design

Rexford, NY 12148
• High Speed Interface (Interfacing, TS 1000)

Interface Innovations

4372 Casa Brazilia, St. Louis, MO 63129
• ScreenMate (Miscellaneous, TS 1000)
• ScreenMate Programs (Games, TS 1000)

International Publishing & Software Inc

3948 Chesswood Drive, Downsview, Ontario, Canada M3J 2W6
• 2K Chess (Games, TS 1000)
• 2K Games Pack (Games, TS 1000)
• Around Europe in 80 Hours (Games, TS 1000)
• Biorhythms (Home, TS 1000)
• Blackjack (Games, TS 1000)
• Bridge (Games, TS 1000)
• Concentration (Games, TS 1000)
• Crown & Scepter (Games, TS 1000)
• Crypto (Games, TS 1000)
• Encounter (Games, TS 1000)
• Escape from Shazzar (Games, TS 1000)
• Flashcard (Education, TS 1000)
• Galactic Commando (Games, TS 1000)
• Galaxy Invaders (Games, TS 1000)
• High-Res Package (Graphics, TS 1000)
• Home Money Manager (Home, TS 1000)
• IPS Fastload (Software, TS 1000)
• Keys to Gondrun (Games, TS 1000)
• Marine Rescue (Games, TS 1000)
• Movie Hangman (Games, TS 1000)
• Mr. Munchee (Games, TS 1000)
• Pac Rabbit (Games, TS 1000)
• Personal Financial Planning Pack (Home, TS 1000)
• Personal Records Storage System (Home, TS 1000)
• Program of Days (Education, TS 1000)
• Shell Game/Number Maze (Games, TS 1000)
• Shoot Out (Games, TS 1000)
• Slots (Games, TS 1000)
• Solar System File (Education, TS 1000)
• Speed Snake (Games, TS 1000)
• Starquest (Games, TS 1000)

Companies

- Tank Trap (Games, TS 1000)
- Tiny Logo (Programming, TS 1000)
- Track Down (Games, TS 1000)
- Weight Control Program (Home, TS 1000)
- Z-AID (Programming, TS 1000)
- Zor (Games, TS 1000)

Isthmus

Winnipeg, Manitoba Canada R2M 4A5
• Anagrams (Games, TS 1000)
• Battleship (Games, TS 1000)
• Hang Robot (Games, TS 1000)
• Master Mind (Games, TS 1000)
• Speller Quiz (Education, TS 1000)
• Tic-Tac-Toe (Games, TS 1000)
• Trivia Challenge (Games, TS 1000)

Italian Connection, The

869 Levitt Pkwy, Rockledge, FL 32955
• Graphing (Education, ZX81, TS 1000)
• Hex/Dec Conversion (Education, ZX81, TS 1000)
• Hi Precision Division (Education, ZX81, TS 1000)
• Lunar Lander (Games, ZX81, TS 1000)
• Machine Language (Programming, ZX81, TS 1000)
• Math (+-x/) (Education, ZX81, TS 1000)
• Pound/Dollar Conversion (Finance, ZX81, TS 1000)
• Sorting (Programming, ZX81, TS 1000)
• Submarine (Games, ZX81, TS 1000)
• Temperature Conversion (Math/Science, ZX81, TS 1000)

J Edmonds

29 Chestnut Ave., Grays, Essex, England
• ZX81 Galaxy Wars (Games, ZX81)
• ZX81 Invaders (Games, ZX81)
• ZX81 Mini Invaders (Games, ZX81)

J. B. Thomison

1601 Westop Trail, Knoxville, TN 37423
• MATSOL (Math/Science, TS 1000)
• Plane Frame (Math/Science, TS 1000)
• Variable Dump (Utilities, TS 1000)

Companies

J. Balogh

State College, PA 16801
• ZX81 2K Upgrade Kit (RAM, ZX81)

J. Brunet

857 St. Honore St., Quebec City, Quebec Canada G1J 2W2
• Astro-Data (Home, TS 1000)

J. C. Kilday Associates

Central Ave, Peaks Island, ME 04108
Owner: John C. Kilday.

- Zeal Disassembler (Programming, TS 2068)

J. C. Software

28 Shipley Rd., Weston, Ontario Canada M9R 3H8
• Plotter 1 (Graphics, TS 1000)
• Two Handed Euchre (Games, TS 1000)

J. K. Greye Software

16 Park Street, Bath, England
• Gamestape 1 (Games, ZX81, TS 1000)
• Gamestape 2 (Games, ZX81, TS 1000)
• Gamestape 3: Catacombs (Games, TS 1000)
• Gamestape 4: 3-D Monster Maze (Games, TS 1000)
• Gamestape 5: 3D Defender (Games, TS 1000)

J. Keene Ltd

3515 Ingleside Dr., Dallas, TX 75229
• Switchboard (Emulator, TS 2068)

J. M. Yocum

Corvallis, OR 97339
• Biorhythms (Games, TS 1000)
• Mastermind (Games, TS 1000)
• Tarot (Miscellaneous, TS 1000)

J. P. Gibbons

14 Avalon Road, Orpington, Kent, BR6 9AX United Kingdom
• Personal Banking System (Home, ZX80, TS 1000)

J. R. Carr

1314 Harrison, Sunnyside, WA 98944
• ZQ-1 (Math/Science, TS 1000)

J. Schwitalla

1235 Pickwick Place, Flint, MI 48507
• Adventure Cassette (Games, ZX80)
• Vegas Cassette (Games, ZX80)

J. W. Collins

6025 Hampstead Drive W., Columbus, OH 43229
• Der Student (Education, TS 1000)

J.L.K. Software

6 Dufferin Place, St. John's, Nfld. Canada A1A 2V1
• Craps (Games, TS 1000)
• Slot (Games, TS 1000)
• The Labyrinth of Qazxl (Games, TS 1000)

JA Specialty Software

3103 Meadow Brook Tr., Birmingham, AL 35243
• Shuttle Designer (Education, TS 2068)

Jack Dohany

390 Rutherford Ave, Redwood, CA 95061
• AERCO CP68 Printer Driver (Utilities, TS 2068)
• Corrected EPROM (ROM, TS 2068)
• Font Manager (Graphics, TS 2068)
• Keyword (Utilities, TS 2068)
• SmartWatch Clock Software (Utilities, TS 2068)
• Spectrum Emulator (Emulator, TS 2068)
• Word-Master (Word Processing, TS 2068)

Jameco

1355 Shoreway Rd, Belmont, CA 94002
Jameco is an electronics and surplus supply house. They sell electronic components, kits and tools to hobbyists. Around 1983, they produced a full keyboard kit and a keyboard overlay, in addition to carrying the Timex/Sinclair 1000 and a number of accessories.

- Keyboard Conversion Kit (Keyboard, TS 1000)
- Keyboard Mask (Keyboard, TS 1000)

James Dupuy

6514 Bradley Ave, Parma, OH 44129
Dupuy was a regular contributor to Computer Trader Magazine.

- Word 1.5 (Word Processing, TS 2068)

Jamm Software

1301 SR 523, Fremont, OH 43420
• Word Puzzle/Yahtzee (Games, TS 1000)

Jason Olasky

8750 Georgia Ave, Silver Spring, MD 20910
• fig-FORTH (Programming, TS 2068)

Jenn Products

Harrison, ME 04040
Owner: Lee Carter.

Jerry Till

527 Downie St., Stratford, ONT Canada N5A 1Y3
• Polykeys (Programming, TS 1000)

JEU Intelligent

Glasgow, VA 24555
• Rubic's Master (Games, TS 1000)

JGS

2 E. Oak Ave., Moorestown, NJ 08057
• Payoff (Finance, TS 1000)

Jim Clatfelter

3361 Sand Ridge Rd, Placerville, CA 95667
• Banners (Graphics, TS 2068)
• VIEWord, MAIList, FORMail (Word Processing, TS 2068)

Jim Griner

Princeville, IL 61559
American agent for Peter Furlong Products, manufacturer of a ZX81 workstation.

- ZX81 Workstation (Miscellaneous, TS 1000)

Companies

Jim Houston Enterprises

414 West Elsmere Pl., San Antonio, TX 78212
• Direct video/inverter (Video, TS 1000)
• Shifter board (Keyboard, TS 1000)

JK Audio

Escondido, CA 92025
• 310 I/O port with real time clock (Interfacing, TS 1000)
• 315 Bare PCB I/O, real time clock board (Interfacing, TS 1000)
• 317 Clock IC and crystal (Interfacing, TS 1000)
• 320 A to D and D to A converter (Interfacing, TS 1000)
• 325 Bare PCB of A/D, D/A (Interfacing, TS 1000)
• 330 Wireless control system (Interfacing, TS 1000)
• 340 Solid State AC switch (Interfacing, TS 1000)
• 350 Relay board (Interfacing, TS 1000)

Joe Smiley

8A Anthony Circle, Newark, DE 19702
• Flight-Planner (Miscellaneous, TS 1000)

John B. Carson, Jr.

11200 Lockwood Dr., Silver Springs, MD 20901
• Golf Handicapper (Miscellaneous, TS 1000)
• IRA Organizer (Finance, TS 1000)
• U.S. Savings Bonds (Finance, TS 1000)

John Marion

Greenup, KY 41144
• Address Storage and Retrieval (ASR) (Database, TS 1000, TS 2068)

John Mathewson

1852 Appleford St., Gloucester, Ontario K1J 6T4 Canada
John Mathewson was president of the Ottawa-Hull Timex/Sinclair User Group for a number of years. He developed a number of unique accessories for the TS 2068, including external keyboards and an adapter to allow use of cartridges via the rear expansion buss.

Companies

- Cartridge Adaptor (Miscellaneous, TS 2068)
- Keyboard System (Keyboard, TS 2068)
- RGB Interface Unit (Video, TS 2068)
- Sound Booster (Sound/Speech, TS 2068)
- Spectrum Interface (Interfacing, TS 2068)
- Spectrum Joystick Interface (Joystick, TS 2068)
- TS2068 Speech Synthesizer (Sound/ Speech, TS 2068)

John McMichael

1710 Palmer Drive, Laramie, WY 82070

- 2068/1520 Printer Interface (Printer, TS 2068)
- Bannerific (Graphics, TS 2068)
- CMS/1520 patch kit (Graphics, TS 2068)
- Collection #1 (Graphics, TS 2068)
- Collection #2 (Graphics, TS 2068)
- Collection #3 (Graphics, TS 2068)
- ColorCopy (Graphics, TS 2068)
- Pic-Plot (Graphics, TS 2068)
- SCLD Chip (Miscellaneous, TS 2068)
- Screen-to-Plotter (Graphics, TS 2068)
- Video 3-D (Graphics, TS 2068)
- VideoCopy (Graphics, TS 2068)
- VideoTex (Graphics, TS 2068)

John Oliger Co.

11601 Whidbey Dr., Cumberland, IN 46229

- 2068 EPROM Programmer (Miscellaneous, TS 2068)
- 2068 Expansion Board (Interfacing, TS 2068)
- 2068 Parallel Printer Port (Printer, TS 2068)
- 2068 Spectrum Joystick Port (Joystick, TS 2068)
- 2068 User Cartridge Board (Miscellaneous, TS 2068)
- 2764 * 2 EPROM Reader (ROM, TS 1000)
- 64K Dynamic RAM (RAM, TS 1000)
- Decoder (RAM, ZX80, ZX81)
- DFh Mapped Universal I/O Port (Interfacing, TS 2068)

- Disk Board A (Disk Drive Systems, TS 2068)
- Disk Board B with NMI Save (Disk Drive Systems, TS 2068)
- Expansion Board (Interfacing, TS 1000)
- Memory Access Monitor (Miscellaneous, TS 1000, TS 2068)
- Parallel Printer Port (Printer, TS 1000)
- TMS 9918A Video Upgrade (Video, TS 1000)
- TMS9918A VDP Enhanced BASIC Programming Cassette (Graphics, TS 1000)
- Vpp Power Supply (Miscellaneous, TS 2068)

John Osborne

Oakwood, IL 61858

- Spelling Program (Education, TS 1000)

John Riggs

1114 Elaine Ave., Livermore, CA 94550

- Farmyard Flying (Games, TS 1000)
- Games Pack Four (Games, TS 1000)
- Games Pack One (Games, TS 1000)
- Games Pack Three (Games, TS 1000)
- Games Pack Two (Games, TS 1000)
- Go-Boom (Games, TS 1000)
- Highway (Games, TS 1000)
- Special Game Collection (Games, TS 1000)

Jon Glazer

Horse Creek, CA 96045

- Brother EP-20 Adapter (Printer, TS 1000)

Jon T. Passler

344 Cabot St, Beverly, MA 01915

- Life (Games, ZX80)

Jorge Sampson

Houston, TX 77288

- TS/VIC-20 Bible Pack (Miscellaneous, TS 1000)

Jose R. Moreno

Miami, FL 33228

- Auto-Dialer 1000 (Miscellaneous, TS 1000)

Joseph L. Hartmann

101 Tonnele Ave., Jersey City, NJ 07306

- Bidirectional Dictionary (Programming, TS 1000)
- PEEK, BASE, PPU Utilities (Programming, TS 1000)

JPR Software, Inc.

Winter Park, FL 32793

- Antropuss (Games, TS 1000)
- Artillery (Games, TS 1000)
- Blackjack (Games, TS 1000)
- Business Subroutines Package, Combo I (Business, TS 1000)
- Craps (Games, TS 1000)
- Domino (Games, TS 1000)
- Electronics (Math/Science, TS 1000)
- Electronics Subroutines, Combo II (Math/ Science, TS 1000)
- Focus (Games, TS 1000)
- Mathematics of Higher Order, Combo IV (Math/Science, TS 1000)
- Megawurm (Games, TS 1000)
- Orgs & Ogres (Games, TS 1000)
- Reddog (Games, TS 1000)
- Roulette (Games, TS 1000)
- Slot Machine (Games, TS 1000)
- The Assassin (Games, TS 1000)
- The Dark Empire (Games, TS 1000)
- Vectors and Hyperbolics Functions, Combo III (Math/Science, TS 1000)
- Yahtzee (Games, TS 1000)

JRC Software

Scottsburg, IN 47170

- 2K Games Pack (Games, TS 1000)
- Assembler (Programming, TS 1000)
- Beep Routine (Music/Speech, ZX81, TS 1000)
- cen-TIC-pede (Games, TS 1000)
- Compass Compiler (Programming, TS 2068)
- Computer Poster (Miscellaneous, TS 1000)
- Diamond Mike (Games, TS 2068)
- Great Game and Graphics Show (Games, TS 2068)
- Incredible Super Tape (Games, TS 1000)

Companies

- Multiple Programs in Memory (Utilities, TS 1000)
- Oscilloscope (Graphics, TS 1000)
- Program Name Reader (Utilities, ZX81, TS 1000)
- Super Fn Plot (Math/Science, TS 1000)
- Super Save/Load (Utilities, TS 1000)
- Tape Unlocker (Utilities, ZX81, TS 1000)
- Text Editor (Word Processing, TS 1000)
- Touch Type Game (Education, TS 1000)

JRS Software

19 Wayside Ave, Worthing, Sussex England BN13 3JU

- 16K RAM Pack (RAM, TS 1000)
- 64K RAM Pack (RAM, TS 1000)
- Battleships & Cruisers (Games, ZX81)
- Black Holes (Games, ZX81)
- Games Pack (Games, ZX81, TS 1000)
- Graphics Toolkit (Programming, TS 1000)
- Programmable Moving Display (Programming, ZX80)
- Programmer's Toolkit (Programming, TS 1000)
- Slalom (Games, ZX81)

JST Enterprises

Brownsville, KY 42210

- 2K to 24K Memory Expansion (RAM, TS 1000)
- Checkbook/Budget (Home, TS 1000)
- Contents (Utilities, TS 1000)
- Keyboard Conversion Plans (Keyboard, TS 1000)
- Sort 2.3 (Utilities, TS 1000)

Just Drop in Software

522 Rolling Ridge, Duncanville, TX 75116

Specializes in software for the TS 1000 without additional memory.

- 2K Program Tape (Miscellaneous, TS 1000)

Just Games

172 Fifth St., Stamford, CT 06905

- Appolo (Games, TS 1000)
- Chopper (Games, TS 1000)
- Crazy Comet (Games, TS 1000)

Companies

- Frantic (Games, TS 1000)
- Froggy Hop (Games, TS 1000)
- Gobbling Goblins (Games, TS 1000)
- High Rollers (Games, TS 1000)
- Horse Race (Games, TS 1000)
- Mission Escape (Games, TS 1000)
- Tennis (Games, TS 1000)

K-2 Electronics

3990 Varsity Drive, Ann Arbor, MI 48104

- Kradle (Keyboard, TS 1000)
- Kradle Communicator (RS232, TS 1000)
- Kradle Manipulator (Interfacing, TS 1000)

K. Roberts

Davidson, NC 28036

- Power Switch (Power, TS 1000)
- TS Demo (Business, TS 1000)

K.D.V.H.E Publishers

Chicago, IL 60680

Kabre Electronics

17880 Los Alamos, Fountain Valley, CA 92708

- Automatic Repeat Function (Keyboard, TS 1000)

Kaltek Calculator Technology

Rochester, NY 14615

Owner: Ben Johnson.

- Blinking Cursor Module (Graphics, ZX80)
- Julian Clock Kit (Miscellaneous, TS 1000)
- RC-103 Analog Interface (Interfacing, TS 1000)
- Shift Lock Module (Keyboard, TS 1000)

Kamel Technology

2802 W. Bay Area Blvd., Webster, TX 77598

- Moontracker (Math/Science, TS 1000)
- Planetfinder (Math/Science, TS 1000)
- Suntracker (Math/Science, TS 1000)

Kamrec Systems

27366 Blum, Roseville, MI 48066

- Crocket (Business, QL)

Kartes Video Communications, Inc.

10 East 106th St., Indianapolis, IN 46280

Katt’s Computers

Chicago Heights, IL 60411

- Back Up Copies (Utilities, TS 1000)

Kayde Electronic Systems Ltd.

The Conge, Norfolk, England

- 16K RAM Pack (RAM, TS 1000)
- 4K Toolkit (Programming, TS 1000)
- Flexible ribbon connector (Miscellaneous, TS 1000)
- KAYDE Keyboard (Keyboard, TS 1000)
- Peckman (Games, TS 1000)

KB Enterprises

8211 Valdosta Ave, San Diego, CA 92126

- 16K RAM Pack (RAM, TS 1000)

Keith Electronics

224 North Grove St, Lock Haven, PA 17745

Kempston Micro Electronics

60 Adamson Court, Highgrounds Road, Kempston England

- Keyboard Bleeper (Keyboard, TS 1000)
- KLIK Keyboard (Keyboard, TS 1000)
- Parallel User I/O (Interfacing, TS 1000)

Ken Doggett

3426 N Fairway Oaks Dr., Lawrenceville, GA 30245

- 5 Games (Games, ZX81, TS 1000)

Ken Lewis

767 Hopetown Rd., Chillicothe, OH 45601

- Small User’s Math (SUM) (Math/Science, TS 1000)

Ken Osborne

17 Shaftesbury Way, Royston, Herts, U.K. SG8 9DE

- ZX81 Window (Programming, ZX81)

Kentronics

Vernon, AL 35592

- Antenna Design (Math/Science, TS 1000)
- Beam Heading (Math/Science, TS 1000)
- Dupe Sheet (Miscellaneous, TS 1000)
- DXCC (Miscellaneous, TS 1000)
- Log Book (Miscellaneous, TS 1000)
- WAS (Miscellaneous, TS 1000)

Kimtech

1608 23rd Ave.N.E., Minneapolis, MN 55418

- States and Capitals (Education, TS 1000)
- Statistical Pac (Math/Science, TS 1000)

Kinetronics Corp

Lake Bluff, IL 60044

- Super-Stats (Math/Science, TS 1000)

King Software

85 Myrtle St., Lowell, MA 01850

Founded by a member of the Sinclair/ Timex User Group of the Boston Computer Society.

- Home Clock Family Bulletins (Home, TS 1000)

KMC Programs

97 Catharine St., Cambridge, England

- Coor (Education, TS 1000)
- Darts (Education, TS 1000)
- Help (Education, TS 1000)

KML Incorporated

New Brunswick, NJ 08903

- Sounder (Keyboard, TS 1000)

Knighted Computers

707 Highland St., Fulton, NY 13069

Owner: Ray Payne.

- 32K RAM Cartridge (RAM, TS 2068)
- Generala (Games, TS 2068)
- Kids on Keys (Games, TS 2068)
- Kindercomp (Games, TS 2068)
- Lotto U.S.A. (Games, TS 2068)
- Machine Code Tutor (Education, TS 2068)

Companies

- Make a Face (Games, TS 2068)
- Multi-Draw 2068 (Graphics, TS 2068)
- Omnicalc 2 (Spreadsheet, TS 2068)
- PC-DRAW (Math/Science, TS 2068)
- The Handicapper (Miscellaneous, TS 2068)
- Tomahawk (Games, TS 2068)
- Trashman (Games, TS 2068)
- Travels with Trashman (Games, TS 2068)
- TS2068 BASIC Toolkit (Programming, TS 2068)
- ZIP BASIC Compiler (Programming, TS 2068)

Koala Softbear

1455 Canora, Mt Royal, Quebec, Canada H3P 2J7

- Naval Command (Games, TS 1000)
- Sack Man (Games, TS 1000)

KOPAK Creations, Inc.

119 Peter St., Union City, NJ 07087

- Edu-Pak-1 (Education, TS 1000)
- KOPAK Keyboard (Keyboard, TS 1000)
- Touch-A-Matic (Keyboard, ZX80, MicroAce, TS 1000)
- Towering Inferno (Games, TS 1000)
- Z-99 Compiler (Programming, TS 1000)

Kraig Pritts

3421 Oneida St, Chadwicks, NY 13319

Ham radio enthusiast, KA2LHO call sign.

- Ham Helper Series (Miscellaneous, TS 1000, TS 2068)

KSOFT

845 Wellner Rd., Naperville, IL 60540

- Tax Return Helper (Finance, TS 1000, TS 2068)
- TS-Artist (The Artist) (Art, TS 1000)

Kurt A. Casby

25 Battle Creek Court, St. Paul, MN 55119

- Casboard 2068 (Terminal, TS 2068)
- XLATE (Terminal, TS 2068)

Companies

L & G Enterprises

Silver Spring, MD 20906

- Car Comp (Miscellaneous, TS 1000)
- Vu-Load (Tape, TS 1000)

L-Monitor

819 Kenyon Ln., Newark, DE 19711

- L-Monitor (Tape, TS 1000)

L-P Overlays

631 W. Main, Madison, IN 47250

- ZX/TS Touch Tab Overlay (Keyboard, TS 1000)

L. A. Westhaver

247 Paul Martin Dr., Waterloo, MD 21227

- Amortizer (Finance, TS 1000)

L. Harmon

4909 Clearlake Dr., Metairie, LA 70002

- Chart Master (Business, TS 1000)
- Data Master (Database, TS 1000)
- Mail Master (Business, TS 1000)

L.J.H. Enterprises

Orange, CA 92667

- Keyboard with complete parts and plans (Keyboard, ZX80)
- Plans for keyboard conversion with reverse video (Keyboard, ZX80)
- Wired keyboard, complete with plans (Keyboard, ZX80)

Labsoft

1707 King St., Jacksonville, FL 32204

- Lab Program I (Math/Science, TS 1000)
- Lab Program II (Math/Science, TS 1000)

Lacrosse

Kellyville, OK 74039

- 6 Games (Games, TS 1000)

LAKAR

36 Western Ave., Morristown, NJ 07960

- Bio-Rhythms (Games, TS 1000)
- Mr. Bartender (Home, TS 1000)

Lamb’s Software, The

1469 Aalborg Way, Solvang, CA 93463

- Armegon (Games, TS 1000)
- Bac-Trac (Games, TS 1000)
- Break-Out (Games, TS 1000)
- Eureka (Games, TS 1000)
- Flips (Games, TS 1000)
- Roadhog (Games, TS 1000)
- Star City (Games, TS 1000)
- Sub Search (Games, TS 1000)

Laminar Inc.

1514 Fairview, Columbus, OH 43212

- RAM-MIT (Accessory, TS 1000)

Lamo-Lem

La Jolla, CA 92038

Owner: Conan La Motte.

- A Night in Las Vegas (Games, ZX80, MicroAce)
- Chest of Classics (Games, ZX80, MicroAce)
- Old #1 (Games, ZX80, MicroAce)
- Super Z (Programming, ZX80, MicroAce)
- ZX80 1K Disassembler (Programming, ZX80)
- ZX80 Bookshelf Cassette Library (Software, ZX80)
- ZX80 Business Package (Business, ZX80)
- ZX80 Home Computer Package (Home, ZX80)
- ZX81 1K Disassembler (Programming, ZX81, TS 1000)
- ZX81 Home Computer Package (Home, ZX81, TS 1000)

LARKEN Electronics

RR #2, Navan, Ontario, Canada K4B-1H9

- LarKen Desk Top Publisher (Graphics, TS 2068)
- LarKen Disk Editor (DOS, TS 2068)
- LarKen Disk System (Disk Drive Systems, TS 2068)
- LarKen RAMdisk (RAM, TS 2068)
- LarKen ZX81 Disk System (Disk Drive Systems, TS 1000)
- LKDOS/Extended BASIC Cartridge (Disk Drive Systems, TS 2068)

- MAXCOM (Terminal, TS 2068)
- Sequential/Random Access Files Support Package (DOS, TS 2068)

Larsoft Software

Waterloo, IL 62298

Laserscan Electronics Corp.

2305 Broadway, Riviera Beach, FL 33404

- 16K RAM Pack (RAM, TS 1000)

Lemke Software Development

2144 White Oak, Wichita, KS 67207

- 1989 Personal Calendar Plus! (Graphics, TS 2068)
- 32K RAM cartridge (RAM, TS 2068)
- Colossus (Graphics, TS 2068)
- Font Library #2 (Graphics, TS 2068)
- Font Library #3 (Graphics, TS 2068)
- Font Package #1 (Graphics, TS 2068)
- Icon Package #1 (Graphics, TS 2068)
- Icon Package #2 (Graphics, TS 2068)
- Masthead Package #2 (Graphics, TS 2068)
- Pixel Print PLUS! (Graphics, TS 2068)
- Pixel Print Professional! (Graphics, TS 2068)
- Pixel Sketch and Graphics Editor (Graphics, TS 2068)
- Poly-Scroll (Graphics, TS 2068)
- Tasword Text Conversion (Word Processing, TS 2068)

LINSAC

Linthorpe, Middlesbrough, Cleveland, TS5 5ES England

- Education Pack 1 (Education, ZX80)
- Education Pack 2 (Education, ZX80)
- Education Pack 3 (Education, ZX80)
- Games Pack 1 (Games, ZX80)
- Games Pack 2 (Games, ZX80)
- Games Pack 3 (Games, ZX80)
- Utility Pack 1 (Utilities, ZX80)

Lloyd Dreger

2461 S. 79th St., West Allis, WI 53219

Author of several books on the 2068 and at least one game.

- Conquest (Games, TS 2068)

Companies

Logan Software

24 Nurses Lane, Skellingthorpe, Lincoln LN6 OTT England

- Directory (Utilities, ZX81)
- ZX80/1 Record (Utilities, ZX80, ZX81, TS 1000)

Luxtron Inc

241 Winter St., Haverhill, MA 01830

- Sync Saver SVR-1 (Power, TS 1000)
- Sync Saver SVR-2 (Power, TS 1000)

Lyon Ware

1520 S. Lyon, Santa Ana CA 92705

Owner: Robert F. Downs.

- Add-A-Switch (Power, TS 1000)

M. A. Smith

2 Solway Rise, Dronfield, Woodhouse, Sheffield U.K. S18 5ZR

- Business Stock Control Program (Business, ZX Spectrum)
- Personalised Share Portfolio (Finance, TS 1000)

M. C. Hoffman

Oakland, NJ 07436

Michael C. Hoffman.

- In-Line Load Monitor (Tape, TS 1000)
- In-Line Voltage Dropper (Power, TS 1000)
- Lost in Space (Games, TS 1000)
- Universal Baseball Card Collection (Home, TS 1000)
- Universal Coin Collection (Home, TS 1000)
- Universal Comic Book Collection (Home, TS 1000)
- Universal Inventory File (Business, TS 1000)
- Universal Mailing List (Business, TS 1000)
- Universal Record Album Collection (Home, TS 1000)
- Universal Stamp Collection (Home, TS 1000)

Companies

M. C. Lothlorien

4 Granby Road, Cheadle, Hulme,
Cheshire U.K. SK8 6LS
Advertised as M. C. Associates and
Lothlorien Computer Games.

- Peloponnesian War (Games, TS 1000)
- Roman Empire (Games, TS 1000)
- Samurai Warrior (Games, TS 1000)
- Tyrant of Athens (Games, TS 1000)
- Warlord (Games, TS 1000)

M. H. Marks Enterprises

315 Thornberry Ct., Pittsburgh, PA
15237
• Handicapper (Games, TS 1000)
• Stock Portfolio (Finance, TS 1000)
• Wall Street Wizard (Finance, TS 1000)

M. K. Rossa

1923 Lithia Rd, Valrico, FL 33594
• Berzxorg, Slots, Screen Streaks, 3-D
Grapher, Engraver (Miscellaneous, TS
1000)

M. R. Madigan

295 Westview Ave, Wadsworth, OH
44281
• Mechanical Design Programs (Math/
Science, TS 1000)

M. Sieder

5710 Milan Blvd., Brossard, Que.,
Canada J4Z 2A9
• Accounts Payable (Business, TS 1000)
• Accounts Receivable (Business, TS
1000)
• Auxiliary Bank Book (Business, TS 1000)
• General Ledger (Business, TS 1000)
• Inventory (Business, TS 1000)
• Sales Aid 1 (Business, TS 1000)
• Sales Journal (Business, TS 1000)
• Tele Memo (Business, TS 1000)

M. T. Ehasz

104 Davis St., Philadelphia, PA 19127
• Inverse Graphics Subroutines (Graphics,
TS 1000)

Mac-Man Software

51 5 W. 236 St., New York, NY 10463
• Addition Primer (Education, TS 1000)
• Alphabet Primer (Education, TS 1000)
• Division Primer (Education, TS 1000)
• Multiplication Primer (Education, TS
1000)
• Multiplication Tables (Education, TS
1000)
• Numbers Primer (Education, TS 1000)
• Spelling Primer (Education, TS 1000)
• Subtractive Primer (Education, TS 1000)

Macronics

26 Spiers Close, Knowle, Solihull, West
Midlands U.K. B93 9ES
Originally advertised as K. Macdonald.

- 16K High Resolution (Art, ZX80)
- Breakout (Games, ZX80)
- F.I.Z. Floppy Disk Interface (Disk Drive
Systems, TS 1000)
- Nightmare Park (Games, TS 1000)
- Space Invaders (Games, ZX80)
- The Amazing Active Display (Utilities,
ZX80)
- ZX81 1K Super Trio (Games, ZX81, TS
1000)
- ZX81 Bumper Pack-1 (Games, TS 1000)

Macshak Software

73-312 Ironwood St., Palm Desert, CA
92260
• Casino Keno (Games, TS 1000)

MacSwan-Packaging Co.

Downey, CA 90241
• Power Supply (Power, TS 1000)

Magic World Software

Olympia, WA 98507
Owner: Brett McCarron.

Also known as Medicine Creek Produc-
tions (1983).

McCarron published magic and mental-
ism books under Magic World Publishers.

- Bookworm (Home, TS 2068)
- Inventory (Business, TS 1000)

MAH Software

341 W. Eagle Lake Dr., Maple Grove,
MN 55369
• Biorhythms (Home, TS 1000)
• Insulator (Home, TS 1000)

Maineware

North Windham, ME 04062

Mallard Software

203 S. Sherwood St., Ft. Collins, CO
80521
Owner: Eric Levine.

- Theile Cabinets (Math/Science, TS 1000)

Mallas Software

147 St. Johns Rd., Wierton, WV 26062
• Grade Master (Education, TS 1000)

Management Services Co.

3227 Pine Needles Rd, High Point, NC
27260
• SYSDOC (Word Processing, TS 1000)
• SYSDTA (Utilities, TS 1000)
• SYSLD (Programming, TS 1000)

Maracomp

1525 N. Euclid, Tucson, AZ 85719
• Base Conversion (Utilities, TS 1000)

Maranatha

Mableton, GA 30059
Harold M. Rabbie.

- Ahamur (Games, TS 1000)
- Checkbook Balancer (Finance, TS 1000)
- Escape (Games, TS 1000)
- Marketing (Games, TS 1000)
- Rebel Raider (Games, TS 1000)
- Text Form (Word Processing, TS 1000)
- Word Processing (Word Processing, TS
1000)

Marex Electronics

2805 Abbeyville, Valley City, OH 44280
• Keyboard beeper (Keyboard, TS 1000)
• ZX80 ROM switch (ROM, ZX80)

Companies

Mark E. Rogers

553 Melrose Dr., LaPlace, LA 70068
• Game Pack for the ZX81 (Games, ZX81,
TS 1000)
• Mars Lander (Games, TS 1000)
• Security Service (Service, TS 1000)

Markel Software

Secaucus, NJ 07094
Owner: Mark L. Fendrick.

- Address Book (Home, TS 2068)
- Appointment Calendar (Business, TS
1000, TS 2068)
- Deduc-table (Finance, TS 1000)
- Financial Record Keeper (Home, TS
1000)
- Financial Record Keeper II (Home, TS
2068)
- Financial Record Keeper Plus (Home,
TS 1000)
- Home Budget Planner (Home, TS 1000)
- Invoice Control (Business, TS 1000)
- Invoice Control II (Business, TS 2068)
- Teachers Gradebook (Education, TS
1000, TS 2068)

Martech Games

9 Dillingburgh Rd., Eastbourne, East
Sussex, U.K.

Martin Irons

46 Magic Circle Dr., Goshen, NY 10924
• The ZX81 Disassembler (Programming,
TS 1000)

Mary Williams

2935 Market, East St. Louis, IL 63103
• Tic-Tac-Toe (Games, TS 1000)

Marydel Frohne

601 IL-83, Bensenville, IL 60106
Marydel Frohne was active in her
church community and, with her husband
Victor, author of a book on teaching Sun-
day school. She later operated Church
School Software with her daughter out of a
Bensenville, Ill., parsonage.

Companies

Original address was the St. John’s United Church of Christ. The building was demolished in 2013 when O’Hare Airport expanded.

- Bible Books (Education, TS 1000)
- Prodigal Son (Education, TS 1000)
- Ten Commandments (Education, TS 1000)

Master Mind, Ltd.

3400 18th St., Plano, TX 75074

- Accounts Pay-Master (Business, TS 1000)
- Check Master (Home, TS 1000)

MATTEX

Shreveport, LA 71104

- ZX80 Cosmic Dog Fight (Games, ZX80, TS 1000)

Matthew Zenkar

142 Holcroft Rd., Rochester, NY 14612

- Edge connector electroplating (Service, ZX80, TS 1000)
- Surge Clamping Diodes (Power, ZX80, TS 1000)

MAV Microproducts

Seattle, WA 98103

- EPROM Programmer/Reader (ROM, TS 1000)

Maxsoft

611 Franklin St, Hamilton, OH 45013

Owner: William Powers.

A division of Maxson Electronics.

- Beat the System (Education, TS 1000, TS 2068)
- Math Master (Education, TS 1000, TS 2068)
- Scramble Bug (Education, TS 1000, TS 2068)
- Super Screen (Programming, TS 1000)

MBR Distributors

Deerfield, IL 60015

McBrine Computer Products

514 S. Jackson St, Salisbury, NC 28144

- Draw 512 (Art, TS 2068)
- Life for the TS2068 v 2.0 (Games, TS 2068)
- Power Print (Utilities, TS 2068)
- Supertools (Utilities, TS 2068)

McKelvie Programs

9 Hamilton Ln., Willingboro, NJ 08046

- GameMaster (Games, ZX81, TS 1000)

MCS Software

2816 Edmond St., St. Joseph, MO 64501

- Passive Solar Design Pack (Math/Science, TS 1000)
- Philatelist (Home, TS 1000)
- Statistics Pack (Math/Science, TS 1000)
- Surveyors Travers Correction (Math/Science, TS 1000)

Mechanical Affinity

513 East Main St., Peru, IN 46970

Supplier of Timex/Sinclair hardware and software. Run by Frank Davis and Paul Holmgren. The company had two addresses, one in Peru, Indiana (Davis) and one in Indianapolis (Holmgren), about 70 miles apart. Holmgren eventually left the business and Davis continued as FWD Computing.

- Internal battery backed clock for QL (Miscellaneous, QL)
- QL Internal ROM Board (ROM, QL)
- QL keyboard membrane (Keyboard, QL)
- Spectrum B ROMs (ROM, TS 2068)
- Speedscreen (ROM, QL)
- TS2068 Dock EPROM Boards (Miscellaneous, TS 2068)

Melbourne House

347 Reedwood Dr., Nashville, TN 37217

- 10 Exciting Programs (Games, ZX81, TS 1000)
- Combat Flight (Games, TS 1000)
- Reversi (Games, ZX81, TS 1000)
- Space Trek (Games, TS 1000)

- Super Invasion (Games, ZX81, TS 1000)
- Toolbox (Programming, ZX81)
- Wall Busters (Games, ZX81, TS 1000)

Melvin MacKaron

Albuquerque, NM 87191

- The Complete Teacher (Education, TS 2068)

Memory Master

Barneгат, NJ 08005

- Code Master (Games, TS 1000)
- Instant Art (Art, TS 1000)
- Spaceflash (Education, TS 1000)
- Stock Analysis and Portfolio (Finance, TS 1000)
- Tarbon’s Revenge (Education, TS 1000)

Memotech

7550 West Yale Ave., #200, Denver, CO 80227

- 16K EPROM (ROM, TS 1000)
- 48K Memory Extension (RAM, ZX81, TS 1000)
- Assembler (Programming, ROM, TS 1000)
- Digitizing Tablet (Miscellaneous, TS 1000)
- Memocalc (ROM, Spreadsheet, TS 1000)
- Memopak 16K (RAM, TS 1000)
- Memopak 32K (RAM, TS 1000)
- Memopak 64K (RAM, TS 1000)
- Memopak Centronics I/F (Printer, TS 1000)
- Memopak HRG (High Resolution Graphics) (Graphics, TS 1000)
- Memopak RS-232 (RS232, TS 1000)
- Memotech Disk Drive (Disk Drive Systems, TS 1000)
- Memotech Keyboard (Keyboard, TS 1000)
- Memotext (ROM, Word Processing, TS 1000)
- Memotext (RAM-based) (Word Processing, TS 1000)

Meta Media Productions

726 West 17th, Vancouver, BC Canada V5Z 1T9

- Q_LINK (Terminal, QL)

Companies

MetaComCo

5353 E Scotts Valley Dr., Scotts Valley, CA 95066

- Assembler (Programming, QL)
- BCPL (Programming, QL)
- LISP (Programming, QL)
- QL C (Programming, QL)
- QL Pascal (Programming, QL)

Metro Technology

313 Vaughn, Ft. Walton Beach, FL 32548

- Morse Code kit (Miscellaneous, TS 1000)

Michael B. Williams

1300 DePaul Way, Virginia Beach, VA 23464

- Demonstration 1000 (Miscellaneous, TS 1000)
- Guess My Number (Games, TS 1000)
- Information 1000 (Database, TS 1000)
- Intruder Alert (Games, TS 1000)
- Sparks! (Games, TS 1000)
- Z-Trek 1000 (Games, TS 1000)

Michael R. Busman

2662 Park Rd., Smyrna, GA 30080

- Heating and Air Conditioning Simulation (Math/Science, TS 1000)

Micro Basics

5768 Albans Circle, Lithonia, GA 30058

- ZX81 2K upgrade (RAM, ZX81)

Micro Computer Software UK

Stockport Rd., Lower Bredbury, Stockport SK6 2BP United Kingdom

- The Diggles Kitchen (Home, TS 1000)

Micro Da et Fils

Gatineau, Que, Canada J8P 6H8

- ZX Joystick (Joystick, TS 1000)
- ZX Phonelist (Home, TS 1000)
- ZX Reflex (Games, TS 1000)

Micro Design Concepts

Carrollton, TX 75006

Companies

Micro Developments

2000 Center Street, Berkeley, CA 94704

Expanders from Micro Developments connected to each other via 16 pin ribbon cables.

- A/D-D/A Expansion Board (Interfacing, TS 1000)
- Beeper, Clock, Switch Board (Interfacing, TS 1000)
- I/O Expansion Port (Interfacing, TS 1000)

Micro Logic Corp

Hackensack, NJ 07602

- 2K RAM Upgrade (RAM, ZX81)
- Micro Chart: BASIC algorithms (Accessory, TS 1000)
- Micro Chart: Z80 Assembly (Accessory, TS 1000)

Micro Systems Development

11105 Shady Trail, Dallas, TX 75229

MSD were better known for their disk drives for Commodore computers.

- RAMPAK 16 (RAM, TS 1000)

Micro-Load

Truth-or-Consequences, NM 87901

- Quickdrive (Programming, TS 1000)

Micro-Mod Specialties

Evansville, WY 82636

- Direct Video (Video, TS 1000)

Micro-Systems Software, Inc.

4301-18 Oak Circle, Boca Raton, FL 33431

Micro-Systems developed MTERM and MSCRIPT for the 2068 and a number of other platforms.

- MSCRIPT (Word Processing, TS 2068)
- MTERM II (Terminal, TS 2068)

Micro-Tech

1019 Brandon Lakes Ave, Valrico, FL 33594

- ZX Typing Tutor (Education, TS 1000)

MicroAce

1348 East Edinger, Santa Ana, CA 92705

- 16K RAM plus Expansion Board (RAM, MicroAce)
- 8K BASIC ROM (ROM, MicroAce)
- MicroAce 1K kit (Computer, MicroAce)
- MicroAce 2K kit (Computer, MicroAce)
- Video upgrade board (Graphics, MicroAce)

MicroCare

414 South Evergreen, Arlington Heights, IL 60005

- TS1000 Service (Service, TS 1000)

Microcomputers Plus, Inc.

349 East Main St., Galesburgh, IL 61401

- Joystick (Joystick, TS 1000)

Micrografix

306 Double Tree, Lewisville, TX 75067

- Alpha Base (Games, TS 1000)

Micromega

230-236 Lavender Hill, London SW11 1LE

- ABC Lift Off (Education, TS 2068)
- Challenge I (Games, ZX81, TS 1000)
- Challenge II (Games, ZX81, TS 1000)
- Comp-U-Share Personal Home Finance (Finance, TS 1000)
- Death Chase (Games, TS 2068)
- Dominoes (Games, TS 2068)
- Monte Carlo (Games, TS 2068)
- Personal Bank Account Management System (Finance, TS 1000)

Microscene

6 Battenhall Rd, Harborne, Birmingham U.K. B17 9UD

MicroSync Services

162 Marlboro St., Keene, NH 03431

- 16K RAM/TS1016 Maintenance Agreement (Service, ZX81, TS 1000)
- ZX81/TS1000 Maintenance Agreement (Service, ZX81, TS 1000)

MicroSync Software

7440 N. Rockwell, Chicago, IL 60645

- Air Traffic (Games, TS 1000)
- Bomber (Games, TS 1000)
- Galaxy Master (Games, ZX81, TS 1000)

Microsystems Specialists, Inc.

Adelphi, MD 20783

- uSS Backup (Utilities, TS 1000)
- uSS Pilot (Programming, TS 1000)

Microtech Marketing

1418 Lansing St, Aurora, CO 80010

Microx

52 The Strand, Worthing, Sussex United Kingdom

- Breakout (Games, TS 1000)
- Colditz (Games, TS 1000)
- Fighter (Games, TS 1000)
- Microbox (Games, TS 1000)
- Trafalgar (Games, TS 1000)

Midwest Software

9922 Harwich, Crestwood, Mo 63126

Midwich Computer Co., Ltd

Rickingmall House, Rickingmall Suffolk, U.K. 1P22 1MM

- Joystick (Joystick, TS 1000)
- Joystick and Controller (Joystick, TS 1000)

Mikro-Gen

24 Agar Crescent, Bracknell, Berkshire, England RG12 2BK

- A/D Converter Board (Interfacing, TS 1000)
- Bomber (Games, TS 1000)
- Breakout (Games, TS 1000)
- Breakout (Games, TS 1000)
- Chess (Games, TS 1000)
- Disassembler/Monitor (Programming, TS 1000)
- Frog (Games, TS 1000)
- Great Uncle Arbuthnot's Inheritance (Games, TS 1000)
- Joysticks (Joystick, TS 1000)
- Paint Maze (Games, TS 1000)
- Shadow of the Unicorn (Games, TS 2068)

Companies

- Sorcerer's Castle (Games, TS 1000)
- Space Asteroids (Games, TS 1000)
- Space Invaders (Games, TS 1000)
- Stormer (Games, TS 1000)
- ZX 1K Gamespack (Games, ZX81, TS 1000)
- ZX Scramble (Games, TS 1000)

Mill Research

2307 Adanac St., Abbotsford, B.C., Canada V25 4T1

- Keltinor's Keep (Games, TS 1000)
- ML Asteroids (Games, TS 1000)
- ML Raiders (Games, TS 1000)
- Pakguy (Games, TS 1000)
- Space Attack and Bomber (Games, TS 1000)

Mind Games

Sheffield Lake, OH 44054

- Hangman 500 (Games, TS 1000)
- Rubitz (Games, TS 1000)
- Supermastermind 1000 (Games, TS 1000)

Mindware, Inc.

15 Tech Circle, Natick, MA 01760

President: Mike Levy

- Advanced Machine Code Monitor (Programming, ZX81)
- Anagrams (Games, TS 1000)
- Computacalc (, TS 1000)
- Cosmos (Games, TS 1000)
- Crossword (Games, TS 1000)
- Data Base/Fast File (Database, TS 1000)
- Forecasting and Graphs (Business, TS 1000)
- Graphic Golf (Games, TS 1000)
- Labyrinth (Games, TS 1000)
- Machine Code Monitor (Programming, TS 1000)
- Matrix Planner (Spreadsheet, TS 1000)
- Multiple Choice (Education, TS 1000)
- MW100 Printer (Printer, TS 1000)
- Numeric (Education, TS 1000)
- Screen Kit (Programming, TS 1000)
- Slide Show (Graphics, TS 1000)
- Word Test (Education, TS 1000)
- Z-Text (Word Processing, TS 1000)

Companies

Mine of Information

1 Francis Ave., St. Albans, U.K. AL3 6BL

- ZX Othello (Games, TS 1000)

Mিনny Electronic Inc

7332 Douglas Dr., Brooklyn Park, MN 55443

- Cross Assembler/6502 (Programming, TS 1000)
- Extended Graphics Package (Graphics, TS 1000)
- ZX-GR Expansion Unit (Graphics, TS 1000)

Mohr and Associates Corp.

111 N. Baltimore, Derby, KS 67037

- Financial Planner (Business, TS 1000)
- Plastic Briefcase (Accessory, TS 1000)
- Tax Favored Programs (Business, TS 1000)

MOPSY

Glen Oaks, NY 11004

- MOPSY (Math/Science, TS 1000)

Mornae Software

15 W 780 Fillmore, Elmhurst, IL 60126

- LINGO 1 (Education, TS 1000)

Mountaineer Software

115 North 7th Ave, Paden City, WV 26159

Owner: Bill Ferrebee.

Bill ran the River Cities Smart BBS that had areas for Timex/Sinclair users.

- Letteriter/Bufferiter (Word Processing, TS 2068)

Mrs. Dan Kurth

Langgasse 51, Busswil, Switzerland CH-3292

- Demon-Driver (Games, TS 1000)

MT-Soft

Aurora, IL 60507

- MT-SOFT The Teacher (Education, TS 1000)

MULE Electronics

444 Lincoln Blvd., Venice, CA 90291

- ZX81 Key-Top Symbols in 3 Colors (Key-board, ZX81, TS 1000)

Musamy Software

11 Brettenham Ave, Walthamstow Eng-land E17 5DG

- Fast Save/Load Program (Utilities, TS 1000)

N. J. Gipson

43 Penn Dr., RD 6, Coatsville, PA 19320

- Self-Starting Program Unlocker (Utilities, TS 1000)

Namal Associates

25 Gwydir Street, Cambridge, England CB1 2LG

- 16K RAM Pack (RAM, TS 1000)
- 64K RAM Pack (RAM, TS 1000)
- Namal Super Talker (Sound/Speech, TS 1000)

Nanos Systems Corp

Speedway, IN 46224

- ZX81 Reference Card (Accessory, TS 1000)

Nanosecond Computer Ser-vices

713 David Whitney Bldg., Detroit, MI 48226

- EZ-Mail (Terminal, TS 1000)

NAP_Ware

940 Beau Dr., Apt 204, Des Plaines, IL 60016

Nazir Pashtoon offered programmable array logic chips (PALs) for the Timex and QL computers.

New England Software

86 South St., Hyannis, MA 02601

- 7 Games Cassette (Games, TS 1000)
- 7 Games for the ZX80 and MicroAce (Games, ZX80, MicroAce)
- BlackJack (Games, TS 1000)

New World Concepts

Ogden, UT 84402

Full line supplier (hardware and soft-ware); summer camp.

NGM Inc.

Oklahoma City, OK 73154

Nicholas Scarim

417 Clinton St., Brooklyn, NY 11231

- Music Theory Workbook (Education, Mu-sic/Speech, TS 1000)

Nick Godwin

4 Hurkur Crescent, Eyemouth, Berwick-shire TD14 5AP Scotland

- GRAPHIX (Graphics, TS 1000)
- Movies (Graphics, TS 1000)

Nimrod Software

4 Stanley Rd., London UK

- Car Log (Home, TS 1000)

Nirad Electronics

959 East 460 South, Provo, UT 84601

- X-81 Space Raiders (Games, TS 1000)

Nissim Elmaleh

5100 Highbridge St., Fayetteville, NY 13066

- Hi-Res Word Processor (Word Process-ing, TS 1000)
- SW-HI-RES (Graphics, TS 1000)

Non-Trivial Solutions

Amarillo, TX 79105

- Letter Raiders (Games, TS 1000)
- Life (Games, TS 1000)
- ZXPRESS (Programming, TS 1000)

Norris Radio & Electronics

144 Terry Dr., Slidell, LA 70458

- Repair Service (Service, ZX81, TS 1000, TS 1500, TS 2068)

Notting Dale Technology Cen-tre

189 Freston Rd, London England W10 6TH

- High Resolution Graphics (Graphics, TS 1000)

Companies

NovelSoft

106 Seventh St, Toronto, Ontario, Canada

- Artworx (Art, TS 2068)
- The Worx! (Miscellaneous, TS 2068)
- TIMACHINE (Programming, TS 2068)
- ZXpert (Miscellaneous, TS 2068)

Oasis Software

Lower North St., Cheddar, Somerset England

- LTEXT and ZTEXT (Word Processing, TS 1000)
- ZX Compendium (Games, TS 1000)

Occam Research, Inc.

34 Washington St., Trumansburg, NY 14886

- Data Acquisition Module (Interfacing, TS 1000)

OCH Jr.

Amite, LA 70422

- 3 Games (Games, TS 1000)

Okoloko Engineering Soft-ware

Ann Arbor, MI 48106

- Frame, Truss and Grid (Math/Science, TS 2068)

Omni Technology

Pittsburgh, PA 15235

- Omni Template (Programming, ZX80, ZX81, TS 1000)

ORBYTE Software

Waterbury, CT 06720

- Biorhythms (Games, TS 1000)
- Compatibility (Home, TS 1000)
- Execu-Soft (Business, TS 1000)
- Expo Tic Tac Toe (Games, TS 1000)
- Graphics I (Graphics, TS 1000)
- Home Budget (Home, TS 1000)
- Home Inventory (Home, TS 1000)
- Income Taxes (Finance, TS 1000)
- Mega Mind (Games, TS 1000)
- Quiz, The (Education, TS 1000)
- Running (Miscellaneous, TS 1000)
- Salvo (Games, TS 1000)
- Speed Reading (Education, TS 1000)

Companies

- Vault of the Centaurs (Games, TS 1000)
- Words (Education, TS 1000)

Original Programs

3763 W. Crocus Dr., Phoenix, AZ 85023

Original Software

605 Apple Hill Ln, Rochester Hills, MI 48064

- 18 Hole Golf Game (Games, TS 1000)
- Air and Sea Attack (Games, TS 1000)
- Elevator Man (Games, TS 1000)
- Phantom Bombs (Games, TS 1000)

Orion’s Belt Enterprises

807 N. Fairway Rd., Glenside, PA 19038

- Analysis (Finance, TS 1000, TS 2068)
- Portfolio (Finance, TS 1000, TS 2068)

Orme Electronics

2 Barripper Rd., Cambridge, Cornwall U.K. TR14 7QN

- 2K “Toolkit” EPROM (ROM, TS 1000)
- EPROM Programmer (Miscellaneous, TS 1000)
- EPROM-READ Card (ROM, TS 1000)

Outbound Engineering

Chandler, TX 75758

- RF shield for ZX80 or Microace (Miscellaneous, ZX80, MicroAce)

Overbyte

902 S.E. 24th Ave, Cape Coral, FL 33904

- Four Programs (Miscellaneous, TS 1000)

Oxford Computer Publishing Ltd.

614 W. Manchester Blvd., Inglewood, CA 90301

- Finance Manager for Spectrum and TS2000 (Business, TS 2000, TS 2068, ZX Spectrum)
- Full Screen Editor/Assembler (Programming, TS 2000, TS 2068, ZX Spectrum)
- Machine Code Test Tool for Spectrum and TS2000 (Programming, TS 2000, TS 2068)

P & B Software

1155 E. Malibu Dr, Tempe, AZ 85282

- Algebra Tutor (Education, TS 1000)
- Animal Quiz (Games, TS 1000)
- Arithmetic Tutor (Education, TS 1000)
- Checkbook Balance (Home, TS 1000)
- Encryptor (Games, TS 1000)
- Energy Analysis (Home, TS 1000)
- Espanol (Education, TS 1000)
- KPL-Kid’s Programming Language (Programming, TS 1000)
- Play the Market (Games, TS 1000)
- Video Calc (Spreadsheet, TS 1000)

P B Thorware

3808 North 97th Place, Milwaukee, WI 53222

- Run For Your Life (Games, TS 1000)
- The ZX/TS Scroll Kit (Programming, TS 1000)

P Symonds

1345 Dewey Ct., Rockledge, FL 32955

Design programs written by a professional engineer. HVAC load, duct, plumbing, sprinkler.

P. Joy

130 Rush Green Road, Essex, RM7 0QA England

- ZX80 Chess (Games, ZX80, MicroAce)

P. Nethercot & R. Rackstraw

19 Markby Close, Moorside, Sunderland, U.K. SR3 2RG

- 23 Bricks (Games, TS 1000)
- Budget Account (Home, TS 1000)
- Class List (Education, TS 1000)
- Mark Sorter (Education, ZX81)
- Mark Total with Averages (Education, ZX81)
- Russian Roulette (Education, TS 1000)
- School Fund (Education, TS 1000)
- Tables (Education, ZX81)
- Ten Tables (Education, ZX81, TS 1000)
- ZX81 CESIL Compiler (Programming, TS 1000)

P.A.L. (Programmers at Large)

Ft. Worth, TX 76112

- Multiple Regression Analysis (Math/Science, TS 1000)
- Simplex Algorithm (Math/Science, TS 1000)

Panda Software

51 Elgin St., Shelton, Stoke-on-Trent U.K. ST4 2RD

- Adder (Games, TS 1000)
- Game Pack I (Games, TS 1000)
- Screen Power (Programming, TS 1000)
- Sea War (Games, TS 1000)

Panero Software

3309 Lewis Ave., Long Beach, CA 90807

- Challenges from Another Dimension (Games, ZX81, TS 1000)
- Defense Wave (Games, ZX81, TS 1000)
- Earthly Challenges (Games, ZX81, TS 1000)
- Evade (Games, ZX81, TS 1000)
- ICBM Barrage (Games, ZX81, TS 1000)
- Lander-X (Games, ZX81, TS 1000)
- Monkey Barrels (Games, ZX81, TS 1000)
- Pickle Man (Games, ZX81, TS 1000)
- Space Challenges (Games, ZX81, TS 1000)
- Tempestous Battle (Games, ZX81, TS 1000)

Pankow Engineering Company

1278 Hendersonville Rd., Asheville, NC 28803

- PRO (Business, TS 2068)

Parker Brothers

Beverly, MA 01915

- Gyruus (Games, TS 2068)
- Loco Motion (Games, TS 2068)
- Montezuma’s Revenge (Games, TS 2068)
- Popeye (Games, TS 2068)
- Q*Bert (Games, TS 2068)
- Return of the Jedi: Death Star Battle (Games, TS 2068)

Companies

- Star Wars - The Arcade Game (Games, TS 2068)

Paul Bingham

Mesa, AZ 85214

- Bingham’s Best (Graphics, TS 2068)
- Jazzofire (Graphics, TS 2068)

Paul Shreeve Software

428 Hall Rd., Norwich, Norfolk, U.K. NR4 6NF

- Learning About Ourselves (Education, TS 1000)
- Primary Maths Package (Education, TS 1000)
- Wordsearch (Games, TS 1000)

Peak

Boulder, CO 80306

- Blackjack (Games, TS 1000)
- Dataplot (Graphics, TS 1000)
- Inverse Video (Graphics, ZX81, TS 1000)
- Mathfun (Education, TS 1000)
- Prodir (Utilities, TS 1000)
- Renumber (Programming, TS 1000)
- String (Programming, TS 1000)
- Text (Word Processing, ZX81)
- Text + Prodir (Word Processing, TS 1000)
- Text II (Word Processing, TS 1000)
- Utility II (Utilities, TS 1000)

Pecos Star Co.

Denton, TX 76203

- Sinclair ZX81 t-shirt (Clothing)

Peech II Productions

6333 Parkman Pl, Cincinnati, OH 45213

- DRAW II (Art, TS 2068)

Pegasus Micro Systems

Chestertown, MD 21620

- Artist’s Friend (Art, TS 2000, TS 2068)
- Astro Map & Conversion (Math/Science, TS 1000, TS 2000, TS 2068)
- Bio-Map (Miscellaneous, TS 2000, TS 2068)
- Cycloids (Games, TS 2000, TS 2068)

Companies

- Design List (Database, TS 1000, TS 2000, TS 2068)
- Music Anth (Music/Speech, TS 2000, TS 2068)
- Omnigraph (Graphics, TS 2000, TS 2068)
- Savings & Loan Advisor (Finance, TS 1000, TS 2000, TS 2068)

People’s Computer Supply, The
Sidney, NE 69162

People’s Software Supply
609 E. N 18th St, Abilene, TX 79601

- Star Trek (Games, TS 2068)
- Text Editor 2000 (Word Processing, TS 2068)

Peripherals Plus
39 East Hanover Place, Morris Plains, NJ 07950

Personal Computer Engineers
Hawthorne, CA 90250

- Personalized Flexible Data Base (Database, TS 1000)

Personal Software Services
112 Oliver Street, Coventry UK CV6 5PF

- Accounts (Business, TS 1000)
- Alien (Games, TS 1000)
- Autofile (Database, TS 1000)
- Breakout (Games, TS 1000)
- Composer (Music/Speech, TS 1000)
- Day at the Races (Games, TS 1000)
- Enhanced Basic (Programming, TS 1000)
- Ghost Hunt (Games, TS 1000)
- Grafix (Graphics, TS 1000)
- Grand Prix (Games, TS 1000)
- Hopper (Games, TS 1000)
- Krazy Kong (Games, TS 1000)
- Maze Death Race (Games, TS 1000)
- MCoder (Programming, TS 1000)
- Pontoon (Games, TS 1000)
- QSave (Tape, TS 1000)
- Space Defender (Games, TS 1000)
- Star Trek (Games, TS 1000)
- Stocks and Shares (Games, TS 1000)

- Tai (Games, TS 1000)
 - Tailgunner (Games, TS 1000)
 - Towers of Hanoi (Games, TS 1000)
 - Wordfix (Word Processing, TS 1000)
- Peter McMullin**
2340 Queen St E., Toronto, Ontario, Canada M4E 1G9
- Word Sinc II.5 & Wordfont (Word Processing, TS 1000)

Pheonix Enterprises
1780 N. DuPont Highway, Dover, DE 19901

- Operation Pheonix (Games, TS 1000, TS 2068)
- T/S Count (Business, TS 1000, TS 2068)

Phoenix Engineering Systems
4240 Lakeshore, Deckerville, MI 48427

- Cassette Interface (Tape, TS 1000)

Photolab
Kennedy Space Center, FL 32815

- Domino (Games, TS 1000)

Pierce Co.
Derby, KS 67037

- Amateur Radio Lists (Miscellaneous, TS 1000)

Pinnacle Software
152 Nagel Crescent, Regina, Sask. Canada S4N 1N9

- Raider of the Ancient Tombs (Games, TS 1000)

Platypus Software
914 Rio Vista Circle SW, Albuquerque, NM 87105

Owner: Al Feng.

- QLAMBer (DOS, QL)
- QLuMSi (DOS, QL)
- SeekQL (Database, QL)

Pleasantrees Programming
7760 N. Hopdown Ave, Tucson, AZ 85741

- 3-D Worm Maze (Games, TS 1000)
- 5 Fun ‘N’ Games (Games, TS 1000)
- Base Conversion (Utilities, TS 1000)
- Boggier (Games, TS 1000)
- City of Xon (Games, ZX81, TS 1000)
- Programming Form Pads (Paper products, TS 1000)
- ZXAK MAN (Games, TS 1000)

Plus + Pac Systems International
Chicago, IL 60610

- Plus + Pac (Miscellaneous, TS 1000)

PM Enterprises
4102 N. 325 W, La Porte, IN 46350

- 2118-7 Memory Chip (Miscellaneous, TS 1000)
- MX-16 RAM (RAM, TS 1000)
- MX-48 RAM (RAM, TS 1000)

PM International
Buckfield, ME 04220

- Master Math (Education, TS 1000)
- Micro Math (Education, TS 1000)

Polymath
Felton, CA 95018

- Educational Aids Program (Education, TS 1000)

Poretsky & Poretsky
521 Argyle Rd., Brooklyn, NY 11218

- Spec-Tax for 2068 (Finance, TS 2068)

Powell Hargrave
Site 5, RR4, Nanaimo, BC, Canada V9R 5X9

- Dragon Hunt (Games, TS 1000)
- Four 16K Programs (Education, Games, TS 1000)
- Keyboard Tactile Feedback Overlay (Keyboard, ZX80, TS 1000)
- Super Data Save (Utilities, TS 1000)
- Word Sinc II.3 (Word Processing, TS 1000)
- Word Sinc II.4 (Word Processing, TS 1000)

Companies

- ZX Froggie (Games, TS 1000)
- Powerplay Systems**
New York, NY 11377
- Air Traffic Control (Games, TS 1000)

Powertronix Electronics
25 E. 23 St., Bayonne, NJ 07002

- 2K RAM Upgrade (RAM, ZX81)
- PTX-I/O (Interfacing, TS 1000)

Practical Computer Products
21111 Strathmore Ln., Huntington Beach, CA 92646

- Graphpak (Business, TS 1000)

Practical Programs Inc.
Milwaukee, WI 53203

- Tax Command (Finance, TS 1000)

Praise Data Systems
205 Pawnee St., Ronkonkoma, NY 11779

- Bible Quiz Games (Education, TS 1000)

Prism Microproducts
49 La Salle Ave, Buffalo, NY 14214

Prism Microproducts were published and distributed in North America by International Publishing and Software, Inc. They shared an address with the publisher of Timex Sinclair User.

- Alien Rain (Games, TS 1000)
- Bomber (Games, TS 1000)
- Demon Adventure (Games, TS 1000)
- Escape From Manhattan (Games, TS 1000)
- Golf (Games, TS 1000)
- J.D. Arcades (Games, TS 1000)
- Music Program (Music/Speech, TS 1000)
- Outrider (Games, TS 1000)
- Party Tricks (Games, TS 1000)
- The Thing (Games, TS 1000)
- Trawler (Games, TS 1000)
- Video Graph (Art, TS 1000)
- Video Map (Games, TS 1000)
- Video Sketch (Art, TS 1000)
- Word Processor (Word Processing, TS 1000)
- Zaraks (Games, TS 1000)

Companies

Professional Electronics

109 Chesney Ln., Columbia, SC 29209

- 3 Port I/O board (Interfacing, ZX80, TS 1000)
- Centronics Printer Interface (Printer, TS 1000)
- Custom Programmed 2K ROMs (ROM, TS 1000)

Proprietary International

131 LaSalle Rd., Streamwood, IL 60103

Contacts: Steve Zwaska (deceased), Randy Wear.

- ZT21000 (Miscellaneous, ZX81, TS 1000)

Pyramid Electronics

2174 Gulf Gate Dr., Sarasota, FL 33581

Owner: Donald Dean.

Pyramid Systems, Inc.

1695 Shenandoah Rd., San Marino, CA 91108

Q&M Publishing

255 N. 1600 W, Provo, UT 84601

- 10 1K Programs (Games, ZX81, TS 1000)

Quantum Computing

Dover, NJ 07801

Sold and supported the QL.

Que Corporation

7960 Castleway Dr., Indianapolis, IN 46250

Quest Research Associates

San Jose, CA 95156

- KP-1 Keyboard Plans (Keyboard, TS 1000)

Quicksilva

426 W. Nakoma, San Antonio, TX 78216

British hardware and software company.

- 1K RAM Board (RAM, ZX80)
- 2K RAM Board (RAM, ZX80)
- 3D Black Star (Games, TS 1000)
- 3D Strategy (Games, TS 2068)
- 3K RAM Board (RAM, ZX80, ZX81, TS 1000)
- Aquaplane (Games, TS 2068)
- Astro Blaster (Games, TS 2068)
- Croaka Crawla (Games, TS 1000)
- Cybird Assault (Games, TS 2068)
- Damper/Glooper (Games, TS 1000)
- Galaxians & Gloops (Games, TS 1000)
- Ghost Town (Games, TS 2068)
- Gridrunner (Games, TS 2068)
- Laser Zone (Games, TS 2068)
- Lost (Games, TS 2068)
- Mined Out (Games, TS 2068)
- Munchees (Games, TS 1000)
- Pioneer Trail (Games, TS 1000)
- QS 16K RAM (RAM, TS 1000)
- QS Asteroids (Games, TS 1000)
- QS CHRS Board (Graphics, TS 1000)
- QS Defender (Games, TS 1000)
- QS HI-RES Board (Graphics, TS 1000)
- QS Motherboard (Interfacing, ZX80, ZX81, TS 1000)
- QS Scramble (Games, TS 1000)
- QS Sound Board (Sound/Speech, ZX80, ZX81, TS 1000)
- Quetzalcoatl (Games, TS 2068)
- Robber (Games, TS 2068)
- Smuggler’s Cove (Games, TS 2068)
- Starfire (Games, TS 2068)
- Subspace Striker (Games, TS 1000)
- The Island (Games, TS 2068)
- The Snowman (Games, TS 2068)
- The Trader Trilogy (Games, TS 2068)
- Timegate (Games, TS 2068)
- Trader (Games, TS 1000)
- Traxx (Games, TS 2068)
- Velnor’s Lair (Games, TS 2068)
- Xadom (Games, TS 2068)

QZX

2025 O’Donnell Dr., Las Cruces, NM 88001

R & R Electronics

1525 N. Ashwicken Ct., State College, PA 16801

Owner: Robert Heil.

- T.A.S. Fix (Printer, TS 2068)

R & R Software

British producer of software for the ZX Spectrum. SoftSync converted Spectrum Golf to the Timex/Sinclair 2068 for Timex Computer Corporation.

R-Tek

7326 Ridgeberry Dr., Houston, TX 77095

- Copy-Cass (Utilities, ZX80, TS 1000)

R. A. Tec.

Young Harris, GA 30582

- Address Book (Home, TS 1000)
- Inventory (Business, TS 1000)

R. D. Brennan

122 The Heights Dr., Don Mills, Ontario Canada M3C 1Y3

- Pro Golf (Games, TS 1000)
- Statistics (Miscellaneous, TS 1000)
- ZX81 Football (Games, TS 1000)

R. H. Enterprises

1408 N. 4th Ave., E. Newton, IA 50208

- Alien Destroyer (Games, ZX81, TS 1000)
- Basketball (Games, ZX81, TS 1000)
- Battery backup (Power, TS 1000)
- Beat the Maze (Games, ZX81, TS 1000)
- Loading monitor (Tape, TS 1000)

R. Howard

3752 Rolison, Redwood City, CA 94063

- 6 ZX81 Programs (Games, ZX81, TS 1000)

R. L. Associates

614 W. Manchester Blvd, Inglewood, CA 90301

- Machine Code Test Tool (Programming, TS 1000)

Companies

R. M. Norris

10402 Montrose Ave., Bethesda, MD 20814

- Joysticks (Joystick, TS 1000)

R. S. Panwar

2035 Kentland Dr., Houston, TX 77067

- ACCR (Database, TS 1000)
- ADDR (Database, TS 1000)
- Checkbook Record (Home, TS 1000)
- Data-base (Database, TS 1000)
- Loan Analysis (Finance, TS 1000)

R. T. Darin Enterprises

451 Center St., Lewiston, NY 14092

- Electronic Circuit Design Programs (Math/Science, TS 1000)

Rafael Ceja Beltran

Emilio Carranza No. 78, San Pedro Tlaquepaque, Jalisco 45500 Mexico

- INVZXTROL (Business, TS 1000)

RAK Electronics

Orange Park, FL 32073

RAm

4736 N. Milwaukee Ave., Chicago, IL 60630

- Designer’s Dream Interface (Interfacing, TS 1000)
- PROM Burner (Programming, TS 1000)
- PROM Burner Development System (Interfacing, TS 1000)
- RAmTray (Accessory, TS 1000, TS 1500)

RAMEX International

Utica, MI 48087

Changed their name to Foundation Systems in 1985 and discontinued support for the TS 2068.

- Appointment Planner (Business, TS 1000)
- Devils of the Deep (Games, TS 2068)
- Everest Ascent (Games, TS 2068)
- Millenia K Disc Drive (Disk Drive Systems, TS 2068)
- Ship of the Line (Games, TS 2068)
- SPDOS (DOS, TS 2068)

Companies

- Super Spy (Games, TS 2068)
- Transylvanian Tower (Games, TS 2068)
- Urban Upstart (Games, TS 2068)
- ZX81 Keyboard (Keyboard, TS 1000)

RAMstrap

104 Ridgeway Ave., Louisville, KY 40207

- RAMstrap (Accessory, TS 1000)

Random Access

Phoenix, AZ 85080

Owner: Steve Pence.

- Direct Video Kit (Video, TS 1000)

Randy Campbell

2843 B Monroe Ln, Grand Junction, CO 81503

- Service Department Records (Business, TS 1000)

Rave Research

1005 Mechanic, Decorah, IA 52101

Specialty was musically related hardware and software.

- Bach Box (Sound/Speech, TS 1000)
- Chord Finder (Music/Speech, TS 1000)
- Game Tape (Games, TS 1000)
- Grif Graf (Graphics, TS 1000)
- Music Tape (Music/Speech, TS 1000)
- Musical Scales (Music/Speech, TS 1000)
- Poly Port (Interfacing, TS 1000)
- Polyphonic System (Sound/Speech, TS 1000)
- Synthi Soft (Music/Speech, TS 1000)

Rayco

Delaware, OH 43015

- Joystick kit (Joystick, TS 1000)

RCO Technical

St. Ann, MO 63074

- Checkstub (Finance, TS 1000)
- Distacalc (Math/Science, TS 1000)
- EZ-HEX (Programming, TS 1000)
- Profit Plan (Business, TS 1000)
- Z-Wryter (Word Processing, TS 1000)

RD Laboratories

5 Kennedy Road, Dane End, Ware, Herts, United Kingdom

Owner: R. E. Dickens

- RD 8100 System (Interfacing, ZX80, TS 1000)

Red Balloon Software

17016 N. Madison Rd., Mead, WA 99021

- Face Odyssey (Games, TS 1000)

Redditch Electronics

21 Ferney Hill Avenue, Redditch, Worcs, U.K. B97 4RU

- 24 Line I/O Port (Interfacing, TS 1000)
- Digital to Analog Converter (Interfacing, TS 1000)
- Keyboard (Keyboard, ZX80, TS 1000)
- Motherboard (Interfacing, ZX80, TS 1000)
- Timer/Counter/Music Board (Interfacing, TS 1000)

Reindeer Enterprises

Millville, NJ 08332

- Escapees (Games, ZX81, TS 1000)
- MC Filer (Database, ZX81, TS 1000)
- Worm Wars (Games, ZX81, TS 1000)

Research Application Products

4561 Paloma Lane, Yorba Linda, CA 92686

- Keyboard Kit (Keyboard, TS 1000)

Research in Speech Technology (R.I.S.T.) Inc.

Brooklyn, NY 11209

Steven J. Veltri, a vice president at R.I.S.T., wrote How to Make Your Computer Talk, a book that described interfacing the General Instruments SPO256-AL2 to multiple microcomputers. Veltri was formerly a product marketing engineer for the speech synthesis lines at General Instruments.

His book described the product R.I.S.T. marketed.

- SPS (Power, TS 1000)
- Talking Poker (Games, TS 1000)
- Text to Speech (Music/Speech, TS 1000)
- The Parrot (Sound/Speech, ZX80, TS 1000)

Research Service Labs

Oklahoma City, OK 73144

- Centronics Printer Interface (Printer, TS 2068)
- Floppy Drive Interface (Disk Drive Systems, TS 2068)

Reston Publishing Company

320 Hudson Ter., Englewood Cliffs, NJ 07632

- CasinoPak 1 (Games, TS 1000)
- Championship Chess (Games, TS 1000)
- Demolition/Ten-Pin (Games, TS 1000)
- Fantasy Pak (Games, TS 1000)
- Monarch (Games, TS 1000)
- Nowotnik Pak (Games, TS 1000)
- Nowotnik Puzzle (Games, TS 1000)
- Strategy Pak (Games, TS 1000)

RG Enterprises

Escondido, CA 92027

Rheesware

1660 S. Duneville, Las Vegas, NV 89102

- Avon (Business, TS 2068)
- Character Creator (Miscellaneous, TS 2068)
- Checkbooker (Home, TS 2068)
- Cookbooker (Home, TS 2068)
- MasterColors (Games, TS 2068)
- Music Master (Music/Speech, TS 2068)
- Printer Interface (Printer, TS 2068)
- Type (Word Processing, TS 2068)
- Wordsearch (Games, TS 2068)

Richard Booth

Sherman Fairchild Laboratory, Lehigh University, Bethlehem, PA 18015

Richard Francis

22 Foxhollow, Cambridge, England

- The Cambridge Collection (Games, ZX81, TS 1000)

Companies

Richard LeFebvre

Lambton, Quebec, Canada G0M 1H0

- BAZIX (Programming, TS 1000)

Richard Smith

3618 W. Park Balboa, Orange, CA

92668

Richard Toy

546 CR 214, Fremont, OH 43420

- Weather Forecaster (Math/Science, TS 1000)

Rimas Buntinas

7440 N. Rockwell, Chicago, IL 60645

- ZX81 Bomber (Games, ZX81, TS 1000)

Riverside Software

Orrington, ME 04474

Owner: Richard Haseltine.

- Blam (Education, TS 2068)

RKL Systems

Leominster, MA 01453

- 16K RAM Pack (RAM, ZX80, TS 1000)
- 32K RAM Pack (RAM, ZX80, TS 1000)
- 48K RAM Pack (RAM, ZX80, TS 1000)
- Dual Joystick System (Joystick, ZX80, TS 1000)
- Single Joystick System (Joystick, ZX80, TS 1000)

RMG Enterprises

14784 S. Quail Grove Circle, Oregon City, OR 97045

Started by Rod Gowen in 1981, RMG served everyone from ZX81 to QL and eventually PC owners.

- LogiCall (DOS, TS 2068)
- MakeDOS-64 (DOS, TS 2068)
- Sektor 2068 (DOS, TS 2068)
- The Kruncher (Utilities, TS 1000, TS 2068)

Robert C. Moler

5999 Secor Rd., Traverse City, MI

49684

- Astro-Utilities (Math/Science, TS 1000)
- Galaxy (Math/Science, TS 1000)

Companies

- Orbit (Math/Science, TS 1000)
- Planets (Math/Science, TS 1000)
- Print-Planets (Math/Science, TS 1000)
- Relativity (Math/Science, TS 1000)

Robert Cannon

309 N. Broadway, Yonkers, NY 10701

Robert Fingerle

Fremont, CA 94537-7793

Also known as Tesseract Software Development.

- Aircraft Performance Program (Math/Science, TS 1000)
- Concept 3-D (Math/Science, QL)
- Textwriter 1000 (Word Processing, TS 1000)
- Textwriter 2000 (Word Processing, TS 2068)
- The Great Glider Race (Games, TS 1000)
- Wordpuzzler (Games, TS 1000)

Robert Fischer

221 Scoggins St., Summerville, GA 30747

- TS Grader (Education, TS 1000, TS 2068)

Robert J. Brady Co.

Bowie, MD 20715

Robert J. Midura

19 Merrifield St., Worcester, MA 01605

- 18 Hole Golf (Games, TS 1000)
- Capitals and States (Education, TS 1000)
- Crazy 8 and Poker 4 (Games, TS 1000)
- Hangman (Games, TS 1000)
- Jet Bomber (Games, TS 1000)
- Lander (Games, TS 1000)
- Minigolf (Games, TS 1000)
- River Assault (Games, TS 1000)
- Strategy at Sea (Games, TS 1000)
- Supplements to 18 Hole Golf (Games, TS 1000)

Robert J. Sabbia

543 Iroquois Tr., Carol Stream, IL 60188

- Speed of Sound Calculator (Math/Science, TS 1000)

Robert Martin

15950 Robson Ct., Fountain Valley, CA 92708

- Equation Solver (Math/Science, TS 1000)
- U Quiz U (Education, TS 1000)

Robert Pearsall

9220 Fountain Rd., Lake Worth, FL 33463

Owner: Robert Pearsall.

Pearsall was also contact for the South Florida Timex/Sinclair Users Group.

- Screen design aide (Paper products, TS 1000)

Robill Products

555 Park Ave., Paterson, NJ 07504

- Cypher 9 (Miscellaneous, TS 1000)
- MX-PAC (Education, TS 1000)

Robot Shack

El Toro, CA 92630

- X-1 Home Robot Kit (Miscellaneous, TS 1000)

Robotec, Inc.

59 C Street, Perrysburg, OH 43460

- Graph I & Graph II (Education, TS 1000)
- NFL/USFL Statistical Summary (Games, TS 1000)
- Phaser Wars (Games, TS 1000)
- Rampager (Programming, TS 1000)
- Tee (Games, TS 1000)
- Torpedo Attack (Games, TS 1000)

Rod Callahan

Miami, OK 74354

- Construction II (Business, TS 1000)

Rom-Pac Applications

5921-A Alhambra, Norcross, GA 30093

Started out as Sinclair Applications.

Roman F. Beck

6452 Salizar Ct., San Diego, CA 92111

- 3-D Graphics Game (Games, TS 1000)

Roman Software

788 Mercury Circle, Littleton, CO 80124

- Tape (1) Games (Games, ZX81, TS 1000)
- Tape (10) General (Miscellaneous, ZX81, TS 1000)
- Tape (2) Diet (Home, ZX81, TS 1000)
- Tape (3) Home (Home, ZX81, TS 1000)
- Tape (4) Business (Business, ZX81, TS 1000)
- Tape (5) Math (Education, ZX81, TS 1000)
- Tape (6) Geometry (Miscellaneous, ZX81, TS 1000)
- Tape (7) Design (Home, ZX81, TS 1000)
- Tape (8) Investment (Finance, ZX81, TS 1000)
- Tape (9) Quiz (Education, ZX81, TS 1000)

Romark Industries, Inc.

20412-29 Center Ridge Rd., Cleveland, OH 44116

- Romark Screen Pads (Paper products, TS 1000)

ROMPAK

8206 Blackburn Ave., Los Angeles, CA 90048

ROMPAK produced circuit boards that could hold a 24-pin (1K-4K)or 28-pin (8K-16K) EPROM and offered several programs on EPROM for use with its board.

- Action-Pak (Games, TS 1000)
- Black-Jack-Pak (Games, TS 1000)
- Blank ROM Cartridge (Miscellaneous, TS 1000)
- Financial-Pak (Finance, TS 1000)
- Galactic Pak (Games, TS 1000)
- Graphix Pak (Graphics, TS 1000)
- Hex Pak (Programming, TS 1000)
- Mini-Pak (Games, TS 1000)
- Muse-Pak (Games, TS 1000)
- Party-Pak (Games, TS 1000)
- Quickload Cartridge (Utilities, TS 1000, TS 1500)

Companies

- Sci-Pak (Math/Science, TS 1000)

Ron Howard

1 Ridgelan, Florissant, MO 63031

- Joystick for 8K ROM ZX80 (Joystick, ZX80)

Ron LeMon

1601 W. 400 S., Salt Lake City, UT 84104

- Alarm Clock/Alarm Timer (Miscellaneous, TS 1000)
- Audio Frequency Counter (Math/Science, TS 1000)
- Audio Recognition System (Sound/Speech, TS 1000)
- Audio Spectrum Analyzer (Music/Speech, TS 1000)
- AUDISY (Music/Speech, TS 1000)
- Biofeedback System (Miscellaneous, TS 1000)
- Burglar Alarm (Home, TS 1000)
- DEFMAG (Music/Speech, TS 1000)
- Fire Alarm (Home, TS 1000)
- ZX Micro Amplifier (Sound/Speech, TS 1000)

Ron Ruegg

4037 Downing, Baton Rouge, LA 70809

- Derby Day (Games, TS 2068)
- RonsTEd (Word Processing, TS 2068)

Ronald Rissel

2967 Lynx Lake Rd., Prescott Valley, AZ 86314

- General Purpose Plotting Routine (Graphics, TS 1000, TS 2068)
- Music Editing Program (Music/Speech, TS 2068)

Rose Cassettes

148 Widney Lane, Solihull, West Midlands, U.K. B91 3LH

- Educational Quiz (Education, TS 1000)
- French Revisions (Education, TS 1000)
- Games (Games, ZX80)
- Intermediate English 1 (Education, TS 1000)
- Intermediate English 2 (Education, TS 1000)

Companies

- Intermediate Maths 1 (Education, TS 1000)
- Intermediate Maths 2 (Education, TS 1000)
- Maths Revisions (Education, TS 1000)
- Primary Arithmetic (Education, TS 1000)
- Tuition (Education, ZX80)

Rosetronix

269 Dahlia, Imperial Beach, CA 92032

- Brainwave Control (Miscellaneous, TS 1000)

Run-It Software Club

732 S. Sherman, Chicago, IL 60605

- Artist (Art, TS 1000)
- Checkbook/Bill Payer (Finance, TS 1000)
- Computer Awareness I (Miscellaneous, TS 1000)
- Graph-It (Graphics, TS 1000)
- Guess It (Games, TS 1000)
- High Level Math (Education, TS 1000)
- Home Records (Home, TS 1000)
- Lab Assistant (Math/Science, TS 1000)
- Market Guru (Finance, TS 1000)
- Masterthink (Games, TS 1000)
- Message Center (Home, TS 1000)
- Mortgage Advisor (Finance, TS 1000)
- Real Estate Advisor (Business, TS 1000)
- Word Play (Games, TS 1000)

Ruskat

3824 E. Paradise Ln, Phoenix, AZ 85032

- Time Rescue (Games, TS 1000)

Ruskraft Engineering

Tinley Park, IL 60477

- ZC Organizer (Accessory, TS 1000)

Russell Brewer

26630 Mill Rd, Frazeysburg, OH 43822

- 3-D Graphics (Graphics, TS 1000)
- Fast-file (Database, TS 1000)
- Rapid Finance (Home, TS 1000)

RW Software

711 N. 8th Street, Beatrice, NE 68310

- The Land Beyond (Games, TS 1000)

S & S Company, The

388 W. Lake Street, Addison, IL 60101

S & S published Synchro-Sette, a magazine that came with a cassette every other issue.

- Business #1 (Business, TS 1000, TS 2068)
- Business #2 (Business, TS 1000, TS 2068)
- Business #3 (Business, TS 1000, TS 2068)
- Business #4 (Business, TS 1000, TS 2068)
- DT File (Utilities, TS 1000, TS 2068)
- Math #1 (Math/Science, TS 1000, TS 2068)
- Message Center (Home, TS 1000, TS 2068)
- Money Managers (Business, TS 1000, TS 2068)
- Party Games (Games, TS 1000, TS 2068)
- Pixie (Art, TS 2068)
- Syntext (Word Processing, TS 1000, TS 2068)
- Thinking Games #1 (Games, TS 1000, TS 2068)
- Utility #1 (Utilities, TS 1000, TS 2068)
- Word Processing Trainer (Word Processing, TS 1000, TS 2068)

S.B.C. Software

17835 North Wind, Fraser, MI 48026

Owner: Steve Cermak.

- The Wiz (Business, TS 2068)

S.C.I.

Mechanicsville, VA 23111

- Inteli-Quiz (Games, TS 1000)

Santa Fe Industries

2342 S. Dundee Ct., Highland, MI 48031

Promised ham radio, accounting, inventory, classroom software and hardware projects.

Savage Software

Titusville, FL 32780

- 10 Great Games (Games, TS 1000)
- Business Logic (Games, TS 1000)
- Casino: Four Games (Games, TS 1000)
- Condition Red (Games, TS 1000)
- Monopoly (Games, TS 1000)
- Space Trek (Games, TS 1000)
- Trader Jack (Games, TS 1000)
- Winged Avenger (Games, TS 1000)

SCDF

Richmond, KY 40475

- Financial Aid (Finance, TS 1000)

Schultz Systems

1026 Ferdinand, San Antonio, TX 78245

- 55-key Keyboard (Keyboard, ZX80)

Scientific Software

6 W. 61 Terrace, Kansas City, MO 64113

- ZXAD Assembler/Debugger (Programming, TS 1000)
- ZXDIS Disassembler (Programming, TS 1000)

Scisoft

5 Minster Gardens, Newthorpe, Eastwood, Notts, U.K.

- Astro Maths (Education, TS 1000, TS 2000, TS 2068)
- Jungle Maths (Education, TS 1000, TS 2000, TS 2068)
- Star Reader (Education, TS 2000, TS 2068)
- Wizard Box (Education, TS 1000, TS 2000, TS 2068)

Scitech Software

1111 El Camino Real, Sunnyvale, CA 94087

- Blackjack for Winners (Games, TS 1000)

Sconzo & Sons

724 Montauk Hwy, Bayport, NY 11705

- The Box (Tape, TS 1000)

Companies

Screenmakers

351 Badger, Guffey, CO 80820

- 4 programs for pre-schoolers and special ed students (Education, TS 1000)
- ZX Computer Power (Clothing)

Sean Wilson

20 Lakevista Ave., Markham, Ont.

Canada L3P 1H5

- Golf (Games, TS 1000)

Seaview Software

981 S. Broad St., Trenton, NJ 08611

- Memory Window (Programming, TS 1000)

Secondbase

700 Lexington Ave, Altoona, PA 16601

Another supplier of the Filesixty keyboard overlay.

- Secondbase keyboard (Keyboard, TS 1000)

Semper Software

585 Glen Ellyn Place, Glen Ellyn, IL 60137

Owner: Michael Amling.

Later developed a Modula-2 compiler for Macintosh computers.

- Partial Pascal (Programming, TS 1000)

Sensible Technical Solutions

3510 E. River Dr., Green Bay, WI 54301

- Easy Z Accounting (Business, TS 1000)
- Easy Z Financial Transactions (Home, TS 1000)
- Easy Z Heat Eliminators (Power, TS 1000)
- Easy Z Mount (Miscellaneous, TS 1000)

Servitronics

Hartford, CT 06145

- Triple Jotsee (Games, TS 1000)
- Wall Street (Games, TS 1000)
- ZX Directory (Database, TS 1000)
- ZX Inventory (Business, TS 1000)

Companies

Sharp’s
127 Nine Mile Rd., Sandston, VA
23150
Owner: Mark Stueber

- Ardennes: Battle of the Bulge (Games, TS 2068)
- Britain Invaded! (Games, TS 2068)
- Fall of Rome (Games, TS 2068)
- Fall of the 3rd Reich (Games, TS 2068)
- Redcoats (Games, TS 2068)
- War in the East (Games, TS 1000, TS 2068, QL)
- Word-Most (Word Processing, TS 2068)

Sight & Sound Electronics
1120 Bailey Hill Rd., Eugene, OR
97402

- Biorhythms (Games, TS 1000)
- Football (Games, TS 1000)
- The Video Reverser (Video, TS 1000)

Sights & Sounds Systems
Richmond, VA 23229

- Custom Carrying Case (Accessory, TS 1000)

Sigma Technology
Virginia Beach, VA 23451

- 4 Port I/O (Interfacing, TS 1000)
- Color Graphics and Sound (Video, TS 1000)
- ST-50 Buffered Motherboard (Miscellaneous, TS 1000)

Signature Software
Blanca, CO 81123

- Amortization (Business, TS 1000)
- Letter Logic (Games, ZX81, TS 1000)
- Wild West Adventure (Games, TS 1000)

Sikes Software
Edmeston, NY 13335

- Blackjack (Games, TS 1000)
- Checkmaster (Home, TS 1000)
- Mega-tron (Games, TS 1000)
- Micromaze (Games, TS 1000)
- Moon Mission (Games, TS 1000)

Silicon Mountain Computers
C-12 Mountain Station, Nelson BC
Canada V1L 5P1
Owner: Fred Nachbaur.

Silicon Mountain Computers was owner Fred Nachbaur’s second Sinclair-focused company. This company specialized in “never-before-seen” hardware and software for the Sinclair ZX81 family, including the Timex 1000, 1500 and the PC8300 clone.

Fred’s goal was to “provide the best hardware and software ever created for these machines.”

Unlike SyncWare, Silicon Mountain products pushed the Sinclair ZX81 to its limits with a bare minimum of additional hardware. Many of the programs only required an 8K static memory board and Wilf Rigter’s WRX16 hi-res software.

- Dungeon of Ymir (Games, TS 1000, TS 1500)
- High-Res Blackjack (Games, TS 1000)
- High-Res Chess Upgrade (Games, TS 1000)
- HIGH*RES Mandlebrot-FFP (Graphics, TS 1000)
- HR*Copy (Graphics, TS 1000)
- IF/Firmware Card (RS232, TS 1000, TS 2068)
- M1* Adaptor (Miscellaneous, TS 1000)
- Macro-Life (Games, TS 1000)
- PC8300 Timex ROM (ROM)
- SCRAM Board (RAM, TS 1000)
- SCRAM-Wich (RAM, TS 1000)
- SMC CPI-1 Printer Interface (Printer, TS 1000)
- SRAM Hi*Res Extended BASIC (Programming, TS 1000)
- The Terminal (RS232, TS 1000, TS 2068)
- Universal Printer Driver (Utilities, TS 1000)
- Year at a Glance (Miscellaneous, TS 1000)
- ZX-TERM*80 (Terminal, TS 1000)

Silicon Valley North
Hammond, IN 46323
President: Richard D. Boltuck.

- Grade Roster (Education, TS 1000)

Silicon Valley Software
2334 Hastings Dr., Belmont, CA 94002

- Chemical Symbols (Education, TS 1000)
- States and Capitals (Education, TS 1000)
- U.S. Presidents (Education, TS 1000)

Simplex Software
220 N Centre St., Merchantville, NJ
08109
Owner: Terrel Kareem.

- Art Pac (Art, TS 1000)
- Combo (Games, TS 1000)
- Edu Pac (Education, TS 1000)
- Finance Pac (Finance, TS 1000)
- Home Pac (Miscellaneous, TS 1000, TS 2068)
- Mathstat Pac (Math/Science, TS 1000)
- Recreational Pac (Games, TS 1000)

Simpson Software
21 Turtles Lane West, Wymondham,
Norfolk, U.K.

- ZX81 Adventure (Games, TS 1000)

Simulusion
Lemon Grove, CA 92045
Formerly Lamo-Lem.

- Appointment Calendar (Business, TS 1000)
- Bank and Tax Register (Business, TS 1000)
- Bartender’s Window (Home, TS 1000)
- Checkbook Balancer (Home, TS 1000)
- Classic Games (Games, ZX81, TS 1000)
- Easy Calc (Spreadsheet, TS 1000)
- Easy Math (Education, TS 1000)
- Escape from Stalag Luft III (Games, TS 1000)
- Etch-a-Screen (Graphics, TS 1000)
- Hey, There! (Graphics, TS 1000)
- Party Nibbles and Bites (Home, TS 1000)

Companies

- The Fantastic Music Machine and Light Show (Music/Speech, TS 1000)

Sin-Time Review
Houston, TX 77274

Sinclair Accessories Ltd.
29703 S. Salo Rd., Mulino, OR 97042

Sinclair Applications
5129 Alhambre Court, Norcross, GA
30093
Change name to ROM-PAC Applications in late 1982.

- 6502 Graphic Hardware Emulator (ROM, TS 1000)
- 6502 Software Emulator (ROM, TS 1000)
- Character Cartridge (ROM, TS 1000)
- Lunar Raiders (Games, TS 1000)

Sinclair Computing
Glenmont, NY 12077

Sinclair Place
Redmond, WA 98052
Distributor for: Abacus, AERCO, Audio-graph, Basicare Microsystems, Down East Computers, Haven Hardware, Kopak, Melbourne House, Memotech, Reston Publishing, William Stuart Systems, Thurnal Electronics, UPSystems.

- 16K RAM (RAM, TS 1000)
- 32K RAM (RAM, TS 1000)
- 64K RAM (RAM, TS 1000)
- Centronics Interface (Printer, TS 1000)
- Compact Keyboard (Keyboard, TS 1000)
- Floppy Disk Interface (Disk Drive Systems, TS 1000)
- Inverse Video Module (Video, TS 1000)
- Joystick Interface (Joystick, TS 1000)
- Professional Keyboard (Keyboard, TS 1000)
- Repeat Key Module (Keyboard, TS 1000)
- Serial Interface (Printer, TS 1000)
- The Lip 16K RAM (RAM, TS 1000)
- Z-Exchequer (Home, TS 1000)

Companies

Sinclair Research Ltd.

3 Sinclair Plaza, Nashua, NH 03061
Sinclair Research was the most recognizable of a series of names for a company Clive Sinclair started to produce his many inventions.

Sinclair Research designed, marketed and sold the MK-14, ZX80, ZX81, ZX Spectrum, QL and a variety of other products.

- 16K RAM (RAM, ZX80, TS 1000)
- 8K BASIC ROM (ROM, ZX80)
- Astronomer’s Guide (Math/Science, TS 1000)
- Cassette 2: Junior Education (Education, TS 1000)
- Cassette 5: Junior Education (Education, ZX81)
- Computer Learning Lab (Accessory, ZX80)
- English Literature 1 (Education, TS 1000)
- English Literature 2 (Education, TS 1000)
- Fantasy Games (Games, TS 1000)
- Geography 1 (Education, TS 1000)
- History 1 (Education, TS 1000)
- Inventions 1 (Education, TS 1000)
- Keytops for QL (Keyboard, QL)
- Mathematics 1 (Education, TS 1000)
- Music 1 (Education, TS 1000)
- QL case (Miscellaneous, QL)
- QL Power Supply (Power, QL)
- Sinclair ZX80 (Computer, ZX80)
- Sinclair ZX81 (Computer)
- Space Raiders and Bombers (Games, TS 1000)
- The Club Record Controller (Database, TS 1000)
- The Collector’s Pack (Database, TS 1000)
- VU-CALC (Spreadsheet, TS 1000)
- VU-FILE (Database, TS 1000)
- ZX Printer (Printer, ZX80, TS 1000)
- ZX Printer Paper (Paper products, TS 1000)

Sinclair Softech

Sinclair, WY 82334
• Eliza (Games, TS 1000)

Sinclair Supply Shack

22626 Woolsey Dr., Novi, MI 48040
• Pinball (Games, TS 1000)

Sinclair Users’ Network

2170 Oak Brook Circle, Palatine, IL 60067

Singh Computer Supplies

Glendale, CA 91205

Sinware

Santa Fe, NM 87504
Owner: Ray Kingsley.

Kingsley was prolific in documenting how to program in machine language and produced several tools for programmers.

- Debugged EXROM (ROM, TS 2068)
- HOT Z (Programming, ZX80, TS 1000)
- HOT Z-II (Programming, TS 1000)
- Hot-Z 2068 (Programming, TS 2068)
- STEP (Programming, TS 1000)
- Z Extra (Database, TS 1000)
- Z-TOOLS (Programming, TS 1000)

SiriusWare

6 Turning Mill Road, Lexington, MA 02173
Owner: David Wood.

Founded by a member of the Sinclair/ Timex User Group of the Boston Computer Society.

- BASIC*OLAY (Programming, TS 1000)
- COMPUSA Disk Utilities (DOS, TS 1000)
- COPY* (Utilities, TS 1000)
- FILE*BASIC (Programming, TS 1000)
- FILE*SYS (Programming, TS 1000)
- FILE*VARS (Programming, TS 1000)
- HEXAS* (Programming, TS 1000)
- LOGIC* (Programming, TS 1000)
- Real Word Processing (Word Processing, TS 1000)

Skelgraf

4415 Basswood Lane, Bellaire, TX 77401

Skelly Computing

50 Riverside Dr., Lake Placid, NY 12946
• Bird Cage (Games, TS 1000)
• Compu-Sketch (Art, TS 1000)
• Guess It (Games, TS 1000)
• Headquarters (Games, TS 1000)
• Math Quiz (Education, TS 1000)

Skinner Electronic Enterprises

Fallbrook, CA 92038
• Personal Finances, Part I (Finance, TS 1000)
• Personal Finances, Part II (Finance, TS 1000)
• Personal Finances, Part III (Finance, TS 1000)

SKOK Software

Chewelah, WA 99109
Owner: Philip Skok

- I Ching (Miscellaneous, TS 1000)
- Tarot (Miscellaneous, TS 1000)

SKT Enterprises

Washington, DC 20024

Small Digital Systems

2089 Chatsworth, San Diego, CA 92107
• Memory One (Utilities, TS 1000)
• REMC (Utilities, TS 1000)

Small System Software

Newbury Park, CA 91320
• Barricade (Games, TS 1000)
• ZXM-1 (Programming, TS 1000)

Smalltyme Software

519 Independence Ave S. E., Washington, DC 20003
• Messenger (Miscellaneous, TS 1000)

Companies

Smartware

Melbourne, FL 32935
• James Bond Adventure #1 (Games, TS 1000)
• Wharri (Games, TS 1000)
• ZX List (Home, TS 1000)
• ZX Yahtzee (Games, TS 1000)

SMUG Project

Fort Wayne, IN 46866
• Wiring Diagrams (Documentation)

Smuk Enterprises

Orleans, Ontario Canada K1C 1S9
• Professional Keyboard Plans (Keyboard, TS 1000)

Soft Clair

Two Enchanted Oaks, Orange, TX 77630
• Warp IO (Games, TS 1000)

Soft Magic Corp.

1210 W. High St., Bryan, OH 43506
• Word Tree (Word Processing, TS 1000)

Soft-Way

3308 Midway Dr., San Diego, CA 92110
• Algebra (Education, TS 1000)
• Game Master (Games, TS 1000)
• Geometry (Education, TS 1000)
• Graphic Trig (Education, TS 1000)
• Math and Electronics (Math/Science, TS 1000)
• Text Tape 2 (Word Processing, TS 1000)
• Utilities Tape 3 (Programming, TS 1000)

Softec

Fairport, NY 14450
• Amplifier CAD (Math/Science, TS 1000)
• Power Supply CAD (Math/Science, TS 1000)

SofTek

Santa Fe, NM 87502
• SixPac (Miscellaneous, TS 1000)

Companies

Softest
10 Richmond Ln., Romsey, Hants S05 8LA United Kingdom

- CGP-115 Driver and Interface (Printer, TS 2068, ZX Spectrum)
- Screen Copy Program (Graphics, TS 2068, ZX Spectrum)
- ZX81 Test (Utilities, ZX81)

Softgems
Mayville, NY 14757

TS 1000/1500 software.

Softmark Associates
210 Fifth Avenue, New York, NY 10010

Softsync, Inc.
New York, NY 10156

Founded in March 1981 by Sue Currier to market programs for the ZX80 written by a friend, Softsync was a major software publisher. Started with only \$1,000, the company grossed over \$1 million by 1983.

Softsync offering some of the first programs in the U.S. for the ZX80 that didn’t come from Sinclair. At one point, they employed nine people full-time and several part-time programmers.

In addition to selling software developed by their own programmers, they also licensed software from the United Kingdom. Many independent programmers sent their software to Softsync in hopes the company would distribute the programs. Though some were “very bad, some are quite good, and we have outside programmers help the authors prepare them for distribution,” said Currier.

Timex distributed a number of programs originally developed or licensed by Softsync.

Softsync shifted to publishing IBM PC and Macintosh software in the mid-1980s. They were acquired by Bloc Development Corp. in 1990.

- 2K Games Pack (Games, TS 1000)

- Advanced Budget Manager (Business, TS 1000)
- Alien Invasion (Games, ZX81, TS 1000)
- Biorhythms (Home, ZX81)
- Computer Tutors: Alpha/Vowel Tutors (Education, TS 1000)
- Computer Tutors: Math Raiders 1000 (Education, TS 1000)
- Cube (Games, ZX81)
- Cyberzone (Games, TS 2068)
- Directory/Record (Utilities, ZX81)
- Double Feature Adventure: Quest for the Holy Grail & The Elusive Mr. Big (Games, TS 1000)
- Graphics Six Pack (Games, ZX81)
- Gulpman (Games, TS 2068)
- Hangman (Games, TS 1000)
- Loan/Mortgage (Home, ZX81)
- Meteorites (Games, TS 1000)
- Mothership (Games, ZX81, TS 1000)
- Personal Accountant (Finance, TS 2068)
- Red Alert (Games, TS 1000)
- Road to Riches (Games, ZX81)
- Shark’s Treasure (Games, TS 1000)
- Space Commando (Games, TS 1000)
- Space Raid/TS Destroyer (Games, TS 1000)
- Space Trek (Games, ZX81)
- Stock Market Calculator, The (Finance, TS 1000)
- Super ZX80 Invasion (Games, ZX80, MicroAce, ZX81)
- Superchess (Games, TS 1000)
- Ten Exciting Programs for the ZX81: 1K (Games, ZX81)
- The Check Book (Home, ZX81)
- The Financial Manager and Record Keeper (Business, TS 1000)
- Uncle Clive T-shirt (Clothing)
- Voice Chess (Games, TS 2068)
- Zeus Assembler (Programming, TS 2068)

Softwar
Rossland, BC Canada V0G 1Y0

- Guadalcanal (Games, TS 1000)

Software Applications
Atascadero, CA 93423

- ZX-Calcul (Spreadsheet, TS 1000)

Software Development Associates
3328 W. Las Palmaistas Dr., Phoenix, AZ 85021

- Auto Record Keeper (Home, TS 1000)
- Deep Space (Games, TS 1000)
- Football (Games, TS 1000)
- Gambler One (Games, TS 1000)
- Games One (Games, TS 1000)
- Games Three (Games, TS 1000)
- Games Two (Games, TS 1000)
- Hangman (Education, TS 1000)
- Home Budget (Home, TS 1000)
- Mine Field (Games, TS 1000)
- Statehood Quiz (Education, TS 1000)
- Word Quiz (Education, TS 1000)

Software Farm, The
Craig Farm, Botany Bay, Tintern, Gwent, U.K.

- Asteroids (Games, ZX81)
- Gobblers (Games, TS 1000)

Software House, The
4226 E. West Hwy, Chevy Chase, MD 20815

- Cassette M1 (Education, TS 1000)
- Cassette M2 (Education, TS 1000)
- Keyboard (Keyboard, TS 1000)
- Voyage Z (Games, TS 1000)

Software Lab East
121 Gordon St., Ridgefield Park, NY 07660

- The Tax Helper Series (Finance, TS 1000)

Software Masters
Evanston, IL 60204

Software Solutions
927 Mears Court, Stanford, CA 94305

Kendric Smith, President.

Software Supermarket
87 Howards Lane, London, U.K. SW1 5 6NU

- Black Crystal (Games, TS 1000)
- Pimania (Games, TS 1000)
- Zuckman (Games, TS 1000)

Companies

Solid Software
10369 Dearlove, Glenview, IL 60025

- Accounts Payable (Business, TS 1000, TS 1500, TS 2068)

Solunar Services
1107 N. Morgan St., Rushville, IN 46173

Owner: Jack Payne.

Used a program on the TS 2068 (written with the help of Imre Auersbacher) to produce hunting and fishing times. The program calculated sunrise, sunset, and more. The program took four hours to produce one set of 52 weeks of tables.

Solutions
Piscataway, NJ 08854

- Filer (Database, TS 1000)
- Reminder (Home, TS 1000)
- Teacher (Education, TS 1000)

Sophia Systems
15122 Pheasant Dr., Surrey, B.C. Canada V3R 4X6

- Management Decisions (Business, TS 1000)
- Personal Finance (Finance, TS 1000)
- Sync Files (Database, TS 1000)
- Word Worker (Word Processing, TS 1000)

Sourceware, Inc.
Vernal, UT 84078

- 1K Gamestape (Games, ZX81, TS 1000)
- Address-A-File (Database, TS 1000)
- Bank Raid (Games, TS 1000)
- Check Stub (Business, TS 1000)
- Home Finance Manager (Finance, TS 1000)
- Invincible Island (Games, TS 2068)
- Jumble Bee (Games, TS 1000)
- Play the Slot Machine (Games, TS 1000)
- SincBasic (Education, TS 1000)
- Speller Bee (Education, TS 1000)
- Text Worker (Word Processing, TS 1000)
- The Board Show (Games, TS 1000)
- The Game of Nim (Games, TS 1000)
- Tic Tac Toad (Education, TS 1000)

Companies

- Word Worker (Word Processing, TS 1000)
- Words to Know and Understand (Education, TS 1000)

Southern Computer Systems

630 Main St., Shelbyville, KY 40065

- Astro 1000 (Games, TS 1000)
- Cosmic Invaders (Games, TS 1000)
- RAM/EPROM Option for ZX-G (Graphics, TS 1000)
- ZX-G Expansion Unit (Graphics, TS 1000)

Space Breaker

Green Bay, WI 54308

- Verify (Utilities, TS 1000)

Spartan Software

1403 Gloria Ln., Boulder City, NV 89005

- Treasure Seeker (Games, TS 1000)

Spectra Computer Products

Tucson, AZ 85717

- Complete Keyboard Plans (Keyboard, TS 1000)
- Complete LOAD and SAVE Plans (Tape, TS 1000)
- Complete Memory Plans (RAM, TS 1000)
- Complete Video Plans (Video, TS 1000)
- E.E. (Math/Science, TS 1000)

Spectracomp

Lansing, MI 48909

- Froggy Highway (Games, TS 1000)

Spectrum West

5717 NE 56th St, Seattle, WA 98106

- Autotrack: Computer Rotor Control (Math/Science, TS 1000)

Speedware

Austin, TX 78760

- Go-fer (Database, TS 1000)
- Go-fer II (Database, TS 1000)

Spencer Software

The Sycamores, Queens Ridge, Hodthorpe UK

- Computing Taster Course (Education, TS 1000)
- Control Taster Course (Education, ZX81, TS 1000)
- Hodthorpe Collection (Education, TS 1000)
- Taster course - Teacher’s Notes (Education, TS 1000)

Spharler Software Systems

9 Springbook Circle, Sacramento, CA 95831

- Graphs and Charts (Graphics, TS 1000)

Spike-Soft

Milton, Ontario, Canada L9T-4Y9

- Games Pack (Games, TS 2068)
- Toggle (Games, TS 2068)

Spyder Electronics

Morgantown, WV 26505

- Spyder Character Board (Graphics, TS 1000)

Stephen Adams

1 Leswin Rd., London UK

- RAM Pack Anti-Wobble (Miscellaneous, TS 1000)
- RZ1 tape controller (Tape, TS 1000)

Stephen Zachev

4859 Elmwood St., Muskegon, MI 49441

- Areas (Math/Science, TS 1000)
- Arithmetic and Geometric Progressions (Education, Math/Science, TS 1000)
- Lunar Cycle (Math/Science, TS 1000)
- Permutations and Combinations (Education, TS 1000)
- The Matrix Package (Math/Science, TS 1000)

Steve Dinstbier

1159 W. Taft Rd., St. Johns, MI 48879

- Adventure in Space (Games, TS 1000)
- Casino (Games, TS 1000)
- Electronics Engineer (Math/Science, TS 1000)

Steve Karash

11 Holland Lane, New Paltz, NY 12561

- Assassin (Games, ZX80, MicroAce)
- Computerized Cowboy (Games, ZX80, MicroAce)
- Deluxe Computerized Cowboy (Games, ZX80, MicroAce)
- Energy Costs (Home, ZX80, MicroAce)
- French Vocabulary (Education, ZX80, MicroAce)
- Home Inventory (Home, ZX80, MicroAce)
- Phone Number Organizer (Home, ZX80, MicroAce)

Sting Graphics

1003 Maclean Ave, Royal Oak, MI 48067

Owner: Steve Spalding

Spalding completed the updates to Pixel Print Plus, version 4, when Stan Lemke exited the market in 1989.

Stock Market Software

1556 Halford Ave, Santa Clara, CA 95051

- Mutual Fund Master (Finance, TS 1000)
- Mutual Fund Minder (Finance, TS 1000)

Story Software

3838 South 97th, Milwaukee, WI 53228

- Character Generator (Games, TS 1000, TS 2068)
- Character Generator II (Games, TS 1000, TS 2068)
- Gallery (Games, TS 2068)
- Maze Racer (Games, TS 1000)
- Spider Cave (Games, TS 1000)

Stratagem Cybernetics Inc.

286 Corbin Place, Brooklyn, NY 11234

- Cyborgwars (Games, TS 1000)

Stream Computers

Lewiston, NY 14092

- Stabilizer Pad (Accessory, TS 1000)

Companies

Stuart Software

25381 Alicia Parkway, Laguna Hills, CA 92653

- NBA Picks (Games, TS 1000)
- Pick ’em (Games, TS 1000)
- Press Release Mailing List (Business, TS 1000)

Sturdivant Laboratories

Bedford, MI 49020

Sum-Ware

810 Mammot Rd., Alden, NY 14004

In January 1985, they announced the opening of their retail store. Later in 1985, they listed an address in Ellenton, Florida.

SUM: The Sinclair/Timex Users Magazine

3224 Northwest 30th Ave, Gainesville, FL 32605

SUMWARE

Shawville, PA 16873

Sunflower Systems

718 E. Ave. B, Hutchinson, KS 67501

- 64K RAM Pack (RAM, TS 1000)

Sunset Electronics

2254 Taraval St., San Francisco, CA 94116

Owner: John Warburton.

Suntronics

12621 Crenshaw Blvd., Hawthorne, CA 90250

- 16K RAM Pack (RAM, TS 1000)
- 64K RAM Pack (RAM, TS 1000)
- KD-81 Keyboard (Keyboard, ZX81, TS 1000)

Support Systems One

Philadelphia, PA 19105

- ELF/1 (Math/Science, TS 1000)
- ICP/1 (Business, TS 1000)
- The Cooler (Power, TS 1000)
- ZXPS/1 (Power, TS 1000)

Companies

Sussex Software House

57 Bexhill Rd., Eastbourne, E. Sussex, United Kingdom

- Beginners Basic Course (Education, TS 1000)
- Sixtyfive ZX81 Programs (Miscellaneous, ZX81, TS 1000)

Syber, Inc.

1325 Diller Rd., Ocean Springs, MS 39564

- Biomate (Games, TS 1000)
- Dragon Lair (Games, TS 1000)
- Financial Manager 1000 (Home, TS 1000)
- Memosha (Utilities, TS 1000)
- MXP (Math/Science, TS 1000)
- Rapid Read (Education, TS 1000)
- Scovi (Graphics, TS 1000)
- Six Pack (Games, TS 1000)
- Spectrex (Graphics, TS 1000)
- Voxcomp (Music/Speech, TS 1000)

Sybex

2344 Sixth St., Berkeley, CA 94710

Sync-Lair, The

1665 Knoll, San Luis Obispo, CA 93401

- Power Paw Power Function Unit (Power, TS 1000)

Synchronize

Kerrville, TX 78028

- Buss (Interfacing, TS 1000)
- DIY Keyboard (Keyboard, TS 1000)
- Edge Connector (Interfacing, TS 1000)
- EPROM Programmer (ROM, TS 1000)
- Joystick Controller (Joystick, TS 1000)
- Keyboard (Keyboard, TS 1000)
- Phone Modem (RS232, TS 1000)
- Power Supply (Power, TS 1000)
- RS-232 (RS232, TS 1000)

Synchronizing Education and Games

668 Sherene Terrace, London, Ontario, Canada N6H 3K1

Owner: Henry Svec.

- 16 1k Programs (Education, ZX81, TS 1000)

SyncMaster

Oak Ridge, NC 27310

- Acey Ducey (Games, TS 1000)
- Alphabet Soup & Numbers Up (Games, TS 1000)
- Business Start-Up Pak #1 (Business, TS 1000)
- Bust Out/Loco (Games, TS 1000)
- Cave In (Games, TS 1000)
- Data Master (Database, TS 1000)
- Decision Making (Business, TS 1000)
- Financial Analyzer (Finance, TS 1000)
- Firing Line (Games, TS 1000)
- Grade Book (Education, TS 1000)
- Insurance Records (Home, TS 1000)
- Machine Language Helper (Programming, TS 1000)
- Matrimony/Noah’s Ark (Games, TS 1000)
- Medical History (Home, TS 1000)
- Mnemosyne Assembler (Programming, TS 1000)
- Number Squares (Games, TS 1000)
- Pinball Wizard (Games, TS 1000)
- Screen Machine (Programming, TS 1000)
- Snake Eyes (Games, TS 1000)
- Stat Master (Math/Science, TS 1000)
- Techni-Stock Market Analysis (Finance, TS 1000)
- Vu-Write (Word Processing, TS 1000)
- Yearly Datebook (Home, TS 1000)

SyncWare Co.

El Monte, CA 91734

Nachbaur later started SyncWare News and changed his company name to Silicon Mountain Computers.

- Baby BBU (Power, TS 1000)
- BBU-1 (Power, TS 1000)
- BBU-2 (Power, TS 1000)
- Common-Emitter Transistor Amplifier (Math/Science, TS 1000)
- Fun and Games I (Games, TS 1000)
- Games I (Games, TS 1000)
- Miner’s Revenge (Games, TS 1000)
- Multiprogram Demo (Programming, TS 1000)
- NFLX Football (Games, TS 1000)
- Storm Lander 3 (Games, TS 1000)

- Super Slide (Games, TS 1000)
- SyncMath (Education, TS 1000)

Synergics Unlimited

3377 California Blvd, Napa, CA 94558

- Calendarfile (Home, TS 1000)
- Healthfile (Home, TS 1000)
- Nutrifile I (Home, TS 1000)
- Nutrifile II (Home, TS 1000)

Synergistic Design

Chicago, IL 60641

Originally called Hard/Software Design. Press release appeared in Infoworld with a photo of their keyboard.

- System Logic KBD-1 Keyboard (Keyboard, TS 1000)
- System Logic KBD-2 Keyboard (Keyboard, TS 1000)

Systems and Solutions, Ltd.

5054 Kenerson Dr, Fairfax, VA 22032

- Arith-1.0 (Education, ZX81, TS 1000)
- Maze 1.0 (Games, ZX80)
- Microartist (Art, ZX81)
- Parrot (Games, ZX81, TS 1000)
- Prisoner (Games, ZX80)
- Subhunter (Games, ZX81)
- ZX-Trek 1.0 (Games, ZX80)

T & C Services

20 Liberty Terrace, Buffalo, NY 14215

T-S Systems

440 Riverside Dr., New York, NY 10027

- Advanced Math (Math/Science, TS 2000, TS 2068)
- Brickbats (Games, TS 1000)
- Color Hi-Res Helper (Graphics, TS 2000, TS 2068)
- Disk-M (Programming, TS 1000)
- Escaping the Maze (Games, TS 2000, TS 2068)
- Graph with Submarine (Games, TS 2000, TS 2068)
- Growing Snake (Games, TS 2000, TS 2068)
- Hi-Res Graphics in Action (Graphics, TS 2000, TS 2068)

Companies

- Hungry Animal (Games, TS 2000, TS 2068)
- Multi-Color Images (Graphics, TS 2000, TS 2068)
- Multiple Screens (Programming, TS 2000, TS 2068)

T-Ware

40 Aspen, Great Falls, MT 59405

Also known as T Dailey.

- Mr. Math (Education, TS 2068)
- Spell World (Education, TS 2068)
- Word/File handling program (Word Processing, TS 1000)

T. L. McDonald

Arcadia, FL 33821

- IPI (Business, TS 1000)

T. W. Cook

Quantico, VA 22134

- 16K or 32K RAM Plans (RAM, ZX81, TS 1000)

T. W. Vessels

Brownsville, KY 42210

- Plans to build full size keyboard (Keyboard, TS 1000)

T/S Connection

3832 Watterson Ave, Cincinnati, OH 45277

Owner: Jack Roberts

Carver Technologies was a division that offered repair and enhancement products for the TS 2068.

Tad Painter

Irving, TX 75016

- Amplifier Unit for TS Computers (Sound/Speech, TS 1000, TS 2068)
- Digitizing Hardware (Sound/Speech, TS 2068)
- Filtered Connector Plug (Sound/Speech, TS 1000, TS 2068)
- Speech Synthesizer (1000/1500) (Music/Speech, TS 1000, TS 1500)
- Speech Synthesizer (2068) (Music/Speech, TS 2068)

Companies

- Talking Alarm Clock for TS2068 (Music/ Speech, TS 2068)
- Talking Biorhythm for TS2068 (Games, TS 2068)
- Talking Space Zap (Games, TS 2068)

TAG Software

Naugatuck, CT 06770

- 5 Educational Programs (Education, TS 1000)
- Areas of Concern (Education, TS 1000)
- Long Division Tutorial (Education, TS 1000)
- Rising Sun (Education, TS 1000)
- Thanks Mr. Newton (Education, TS 1000)
- Vins Francais (Miscellaneous, TS 1000)

Tasman Software

17 Hartley Crescent, Leeds LS6 2LL UK

- TASCOPY (Graphics, TS 2068)
- Tasman Printer Interface (Printer, TS 2068)
- TASPRINT (Utilities, TS 2068)
- TASWIDE (Utilities, TS 2068)
- Tasword Two (Word Processing, TS 2068)

Technology Products and Services, Inc.

1012 Clearwater Place, West Palm Beach, FL 33404

- Perform Energy Audits (Business, TS 1000)

Technomatic

17 Burnley Rd NW10 England

- ZX80/1 User Port (Interfacing, ZX80, TS 1000)

TEJ Computer Enterprises

859 N. Virgil Ave, Lost Angeles, CA 90029

- Textman (Word Processing, TS 2068)

Teletek Co.

15 Central Way, Kirkland, WA 98033

- Complete Portfolio Management (Finance, TS 1000)

- Personal Wealth Achiever (Finance, TS 1000)
- Stock Market Program (Finance, TS 1000)

Tensor Technology

Irvine, CA 92713

- Cassette 1 (Games, ZX80)
- Cassette 2 (Games, ZX80)
- Pharaohs Treasure (Games, ZX80)

Tex Micro Inc.

3700 S. Hopkins, Titusville, FL 32780

- \$CRYPTPIC GOLD\$ (Games, ZX81, TS 1000, TS 1500)

Theodore J. Dunn

151 Greenville Ave., Jersey City, NJ 07305

- Check Register (Business, TS 1000)
- Client Data File (Business, TS 1000)
- Depreciation (Finance, TS 1000)
- Mortgagor (Finance, TS 1000)
- Taxware (Finance, TS 1000)

THM Software

154 Laconia Ave, Staten Island, NY 10305

Owner: T. H. McComb.

- Z.S.S. Sinclair, Cold Shutdown (Games, TS 1000)

Thomas B. Woods

POB 64, Jefferson, NH 03583

- 32K Non-Volatile Memory RAM Board/ Cartidge (RAM, TS 2068)
- Computer I/O Data Communications (Miscellaneous, TS 1000, TS 2068)
- Extended Basic (Programming, TS 1000)
- Linear Search (Programming, TS 1000)
- Mad Dog Tank Blaster (Games, TS 1000)
- Morse Code Translator (Math/Science, TS 2068)
- Pro/File 2068 (Database, TS 2068)
- Pseudoscope for TS2068 (Math/Science, TS 2068)
- Sort (Programming, ZX81, TS 1000)
- Universal I/O Port (Interfacing, TS 1000, TS 2068)

- WA-TOR (Miscellaneous, TS 1000)
- ZX Data Finder (Database, TS 1000)
- ZX Pro/File (Database, TS 1000)
- ZX Telephone Book (Home, TS 1000)

Thomas H Nooter

320 East 25th Street, New York, NY 10010

- Casino Blackjack (Games, TS 2068)
- Racing Form Analyzer (Games, TS 1000, TS 2068)
- Stock Market Price Analysis (Finance, TS 1000, TS 2068)

Thomas J. Smith

43715 Gadsden Ave., Lancaster, CA 93534

Thomson Software

Lombard, IL 60148

Owner: Paul Thomson.

- Morse Code Translator (Math/Science, TS 1000)
- Music Box (Music/Speech, TS 1000)
- Talking TS1000 (Music/Speech, TS 1000)

Thurnall Electronics

95 Liverpool Road, Cadishead, Manchester, M30 5BG England

- 16-line Programmable I/O Port (Interfacing, TS 1000)
- 4-channel Relay Box (Interfacing, TS 1000)
- 8-way Indicator Unit (Interfacing, TS 1000)
- 8-way Switch Unit (Interfacing, TS 1000)
- 8-way Transistor Driver (Interfacing, TS 1000)
- Joystick (Joystick, TS 1000)
- Motherboard (Interfacing, TS 1000)
- Sound Unit (Sound/Speech, TS 1000)

Tim Humphries

16 Coniston Road, Sutton Coldfield, West Midlands, England

- ZX80 Multiple Line Statements (Programming, ZX80)

Companies

Time Data

3 Waldon Road, Califon, NJ 07830

Time Designs Magazine Company

29722 Hult Rd., Colton, OR 97017

Time X Town/Monixware

Newfoundland, NJ 07435

- Compucat (Miscellaneous, TS 1000)

Time/Sinc Directory

Milwaukee, WI 53223

Timensa Software

3707 Downey Dale Dr., Randallstown, MD 21133

- DO-CALC (Spreadsheet, TS 1000, TS 2068)

Timewars

5537 Dumfries Court, Dublin, OH 43017

- Waterloo Campaign (Games, TS 1000)

Timeworks, Inc.

405 Lake Cook Rd., Deerfield, IL 60015

- 5 2K Family Pack (Home, TS 1000)
- 5 2K Games (Games, TS 1000)
- Beginning Game Design (Education, TS 1000)
- Cave of the Word Wizard (Games, TS 1000)
- Collector's Companion, The (Home, TS 1000)
- Control Center (Accessory, TS 1000)
- Data Master (Database, TS 1000)
- Dungeon of the Algebra Dragons (Games, TS 1000)
- Electronic Checkbook, The (Home, TS 1000)
- Forget-Me-Not (Home, TS 1000)
- Insurance Property Record, The (Home, TS 1000)
- Intermediate Data Handling (Education, TS 1000)
- Intermediate Game Design (Education, TS 1000)
- Presidential Campaign (Games, TS 1000)
- Programming Kit 1 (Education, TS 1000)

Companies

- Robbers of the Lost Tomb (Games, TS 1000)
- Scyon’s Revenge (Games, TS 1000)
- Star Battle (Games, TS 1000)
- The Money Manager (Home, TS 1000)
- The Quiz Kit (Games, TS 1000)
- Wall Street (Games, TS 1000)

Timex Computer Corporation
Waterbury, CT

While the Timex Corporation is best known for its watches, it also produced a number of other products since its inception as a clock company in the mid-1800s. During World War II, the company produced fuse timers for defense products, continuing through the 1950s and the Korean war.

After the Korean war ended, Timex expanded its wristwatch operations. Traditionally the domain of jewelers, Timex opened new distribution channels in department stores, cigar stands, drug stores and other mass-market outlets. Demand for the company’s watches required increased production capacity and Timex built new plants in the United States, Europe and Asia.

Timex, as a result of its numerous plants across the world, had excess production capacity that opened a new market for the company as contract manufacturer. One of the company’s first clients was the Polaroid Corporation. Timex was the exclusive manufacturer for all Polaroid companies, worldwide, throughout the 1970s, eventually making more than 44 million cameras.

Time also produced computer components for major manufacturers and the Nimslo three-dimensional 35mm camera.

Agreement with Sinclair

This excess capacity led Timex’s agreement with Sinclair to manufacture the ZX81 computer, at its Dundee, Scotland plant.

As part of the agreement, Timex had the option to market the ZX81 under its own

name, once sales of the Sinclair ZX81 in the United States exceeded 500,000 units. The agreement extended to future Sinclair computers, resulting in the Timex/Sinclair 2068.

The Timex Computer Corporation, a subsidiary of Timex Corporation, was formed to market Timex/Sinclair products in the United States.

Timex announced that it would manufacture and market the Timex/Sinclair 1000, the first computer to break the \$100 price barrier, on April 20, 1982.

Key Employees

The corporation started with six employees:

- Bob Behler, engineering
- Carlos Dragovich, production
- George Grimm, software manager
- Margot Murphy, marketing services manager
- Dan Ross, vice president and chief operating officer
- Billy Skyrme, director of product planning

Eventually, others joined Timex as they needed more expertise to launch the 2068. They included:

- Michael Branigin
- V. Carole Corcoran
- Charles Durang, writer
- Lou Galie, director of engineering
- Gary Grimes, design manager, computer products
- Rex Naden, vice-president of research and design
- Kirk Pond, executive vice-president
- Sue Mahoney, technical support manager

The key decision makers were Dan Ross, Kirk Pond, and Rex Naden. Naden and Pond came to Timex from Texas Instruments; Galie and Branigin came from Burroughs.

Companies

Other employees:

- Paul Schirloff, editor of Ramblings
- Lem Tarshis, executive vice president at Timex
- Martha Warner-Dubay

Products

- Address Manager (Home)
- Algebra I (Education, TS 1000)
- Algebra II (Education, TS 1000)
- Androids (Games, TS 2068)
- Androids (cart) (Games, TS 2068)
- Astronomer’s Guide (Math/Science, TS 1000)
- Ator the ABC Gator (Education, TS 1000)
- Auto Analyzer (Home, TS 2068)
- Automobile Analyzer (Home, TS 1000)
- Backgammon and Dice (Games, TS 1000)
- Bat Cage (Games, TS 1000)
- Bigflap Attack (Games, TS 1000)
- Blind Alley (Games, TS 2068)
- Capitalization Master (Education, TS 2068)
- Capitalization Master (Education, TS 1000)
- Casino 1 (Games, TS 2068)
- Casino 1 (cart) (Games, TS 2068)
- Checkbook Manager (Home, TS 1000)
- Chess (Games, TS 2068)
- Chess (cart) (Games, TS 1000)
- Chess and Chess Clock (Games, TS 1000)
- Circuit Board Scramble (Games, TS 2068)
- College Cost Analyzer (Home, TS 1000)
- Computer Coach (Education, TS 1000)
- Conversational French (Education, TS 1000)
- Conversational German (Education, TS 1000)
- Conversational Spanish (Education, TS 1000)
- Coupon Manager (Home, TS 1000)
- Crazy Bugs (cart) (Games, TS 2068)
- Crazy Bugs! (Games, TS 2068)
- Critical Path Analysis (Business, TS 1000)
- Crossfire (Games, TS 2068)

- Cube Game (Games, TS 1000)
- Doobarry Domino the Counting Phenomeno (Education, TS 1000)
- Dragmaster (Games, TS 2068)
- Electric Cost Analyzer (Home, TS 1000)
- EPROM Cartridge Board (Emulator, TS 2068)
- EPROM Store Demonstrator (Miscellaneous, TS 1000)
- Fishing for Numbers (Education, TS 2068)
- Flight Simulator (Games, TS 2068)
- Flight Simulator (Games, TS 1000)
- Flight Simulator (cart) (Games, TS 2068)
- Flight Simulator (cart) (Games, TS 1000)
- Fortress of Zorlac (Games, TS 1000)
- French Tutorial (Education, TS 2068)
- Frogger (Games, TS 2068)
- Frogger (Games, TS 1000)
- Fun Golf (Games, TS 2068)
- Fundamentals of Math (Education, TS 1000)
- Galactic Gunner (Games, TS 1000)
- Galaxy Attack (Games, TS 2068)
- Game Time I (Games, TS 2068)
- Geometry I (Education, TS 1000)
- Grimm’s Fairy Trails (Games, TS 1000)
- Guardian (Games, TS 2068)
- Guitar for Beginners (Education, TS 2068)
- Guitar for Beginners (Education, TS 1000)
- Heating System Analyser (Home, TS 2068)
- Heating System Analyzer (Home, TS 1000)
- Home Improvement Planner (Home, TS 1000)
- Horace & the Spiders (Games, TS 2068)
- Horace Goes Skiing (Games, TS 2068)
- Hungry Horace (Games, TS 2068)
- Inside/Outside Earth (Education, TS 2068)
- Introduction to Chemistry (Education, TS 1000)
- Inventory Control (Business, TS 1000)
- Kasino Kraps (Games, TS 1000)
- Keyboard Calculator (Home, TS 1000)
- Keyboard Tutorial/Turtle Graphics/Home Accounting (Games, TS 2068)
- Kid Grams (Education, TS 2068)

Companies

- Language Usage (Education, TS 2068)
- Language Usage (Education, TS 1000)
- Manufacturing Control (Business, TS 1000)
- Math Wizardry I (Education, TS 2068)
- Math Wizardry II (Education, TS 2068)
- Merchant of Venus (Games, TS 1000)
- Mixed Game Bag I (Games, TS 1000)
- Mixed Game Bag II (Games, TS 1000)
- Mixed Game Bag III (Games, TS 1000)
- Money Analyzer 1 (Finance, TS 1000)
- Money Analyzer 2 (Business, TS 1000)
- Music Educator I (Education, TS 1000)
- Our Intriguing Solar System (Education, TS 2068)
- Penetrator (Games, TS 2068)
- Penetrator (cart) (Games, TS 2068)
- Personal Finance Planner (Home, TS 1000)
- Personal Home Finance (Home, TS 2068)
- Personal Portfolio Manager (Finance, TS 2068)
- Pinball (Games, TS 1000)
- Pinball (Games, TS 2068)
- Pinball (cart) (Games, TS 2068)
- Portfolio Analysis (Finance, TS 1000)
- Power Pack 1 (Education, TS 1000)
- Presidents (Education, TS 1000)
- Pro Golf (Games, TS 2068)
- Punctuation Master (Education, TS 1000)
- Quadra-Chart (Business, TS 2068)
- RAM Runner (Games, TS 1000)
- Real Estate Investment Analysis (Business, TS 1000)
- Set Theory (Education, TS 2068)
- Smart Terminal 1 (Terminal, TS 1000, TS 2068)
- Solar Water Heater Designer (Home, TS 1000)
- Space Raiders (Games, TS 2068)
- Spanish Tutorial (Education, TS 2068)
- Spelling Bee (Education, TS 1000)
- Spelling I (Education, TS 2068)
- Spelling II (Education, TS 2068)
- Stamp Collector (Home, TS 1000)
- States and Capitals (Education, TS 2068)
- States and Capitals (Education, TS 1000)

- States and Capitals (cart) (Education, TS 2068)
- States and Capitals (cart) (Education, TS 1000)
- Statistics (Education, TS 2068)
- Statistics (Business, TS 1000)
- Stock Market Game (Games, TS 1000)
- Stock Market Simulator (Games, TS 2068)
- Stock Market Tech. Analysis I (Business, TS 1000)
- Stock Option Analyzer, The (Finance, TS 1000)
- Strategy Football (Games, TS 1000)
- Super Math (Education, TS 2068)
- Super Math (Education, TS 1000)
- Super Math (cart) (Education, TS 1000)
- Superdoodles (Education, TS 1000)
- Supermaze (Games, TS 1000)
- Swordfight (Games, TS 2068)
- Swordfight (cart) (Games, TS 2068)
- Tarot (Games, TS 1000)
- Teacher’s Gradebook (Education, TS 1000)
- The Budgeter (Home, TS 1000)
- The Budgeter (Home, TS 2068)
- The Budgeter (cart) (Home, TS 2068)
- The Carpooler (Home, TS 1000)
- The Challenger I (Games, TS 1000)
- The Checkbook Manager (Home, TS 2068)
- The Gambler (Games, TS 1000)
- The Home Asset Manager (Home, TS 1000)
- The Home Improvement Planner (Home, TS 2068)
- The IRA Planner (Finance, TS 1000)
- The List Manager (Business, TS 1000)
- The Loan/Mortgage Amortizer (Home, TS 1000)
- The Organizer (Database, TS 1000)
- The Puzzler (Games, TS 1000)
- The Starter (Miscellaneous, TS 1000)
- Time Teacher I (Education, TS 2068)
- Time Teacher II (Education, TS 2068)
- Timex/Sinclair 1000 (Computer)
- Timex/Sinclair 1500 (Computer)
- Timex/Sinclair 2000 (Computer)
- Timex/Sinclair 2068 (Computer)
- Timex/Sinclair 3068 (Computer)
- Total Triangles (Education, TS 1000)

- Trap (Games, TS 1000)
- Trident (Games, TS 1000)
- TS 1016 RAM pack (Hardware, RAM, TS 1000)
- TS 1510 Command Cartridge Player (ROM, TS 1000, TS 1500)
- TS 2020 Cassette Recorder (Hardware, Tape)
- TS 2040 Printer (Printer, TS 1000, TS 2068)
- TS 2040 Printer Paper (Paper products)
- TS 2050 Modem (RS232, TS 1000, TS 2068)
- TS 2060 Bus Expansion Unit (Hardware, Miscellaneous, TS 2068)
- TS 2065 Microdrive (Disk Drive Systems, Hardware, TS 2068)
- TS 2080 80 Column Printer (Hardware, Printer, TS 2068)
- TS 2090 Commandstick (Hardware, Joy-stick, TS 2068)
- TS 1050 Carrying Case (Accessory, TS 1000, TS 1500)
- VU-3D (Graphics, TS 2068)
- VU-CALC (Spreadsheet, TS 2068)
- VU-CALC (cart) (Spreadsheet, TS 2068)
- VU-FILE (Database, TS 2068)
- VU-FILE (cart) (Database, TS 2068)
- Word Cross (Games, TS 2068)
- Word Play I (Games, TS 2068)
- Word Play II (Games, TS 2068)
- Word Quest (Games, TS 1000)
- Yard Improvement Planner (Home, TS 2068)

Timex Portugal

- Portugal
- FDD 3 Disk Drive system (Disk Drive Systems, TS 2068, TC 2068, ZX Spectrum)
 - FDD 3000 Disk Drive system (Disk Drive Systems, TS 2068)
 - Interface RS-232 (RS232, TC 2068)
 - Timex Computer 2068 (Computer, TS 2068, TC 2068)

Companies

Toco Technology

- Santa Claus, IN 47579
- Fed-Tax Software System (Finance, TS 1000)
 - Techni-Stock Software System (Finance, TS 1000)

Tom Bent

- 9016 Flicker Place, Columbia, MD 21045
- Tom Bent was editor for SyncWare News starting with volume 2. He also produced a debugged and improved version of the ZX81/TS 1000 ROM.

- Improved ROM for TS1000 (ROM, ZX81, TS 1000, TS 1500)

Tom Cole

- 1314 Speight #15, Waco, TX 76706
- FASTFILE (Database, TS 1000, TS 1500)

Toptronics Company

- 4018-A W. Chandler Ave, Santa Ana, CA 92704
- Keyboard (Keyboard, TS 1000)

Topware

Princeton, IL 61356

Toronto Software World

Agincourt, ONT, Canada M1S 3B4

Traffic Technology Limited

- Warminster, Wiltshire BA12 7QX United Kingdom
- Sinclair ZX81 Desk Console (Accessory, TS 1000)

Tree Systems of Grand Rapids

3645 28th St, Grand Rapids, MI 49608

Bob Alsum, owner.

- Pluri-Forth (ROM, TS 1000)

Companies

Tri-Soft

Seal Beach, CA 90740
Owner: R. A. Book

- Computer Boxing (Games, TS 1000)
- Journey Through the Asteroid Belt (Games, TS 1000)

Trigon

572 Avenida De La Plata, Newbury Park, CA 91320
• Mozart (Sound/Speech, TS 1000)

Trixieware

176 Midanbury Ln., Southampton SO2 4GX United Kingdom
• Draw Poker (Games, TS 1000)

Troiano Software Company

Nesconset, NY 11767
• PRG-DLR (Utilities, TS 1000)
• Starter Software Package (Education, TS 1000)

TS Horizons

2002 Summit St, Portsmouth, OH 45662

TSG Enterprises

54 Richwood Pl., Denville, NJ 07834

Turner, Elcy & Com.

Port Huron, MI 48061
• Detention Station Intrag (Games, TS 1000)
• Escape From the Dark System (Games, TS 1000)
• Labyrinth of the Necromancer (Games, TS 1000)
• Raid on Colony Alpha (Games, TS 1000)
• The Maltraxians Attack (Games, TS 1000)
• Under the Temple of Khardam (Games, TS 1000)

TV Service of Cambridge Ltd

Chesterton Mill, French's Road, Cambridge, CB4 3NP England
• Keyboard Audio Tone (Keyboard, TS 1000)

UAS

Haddonfield, NJ 08033
• Auto Diagnostic (Home, TS 1000)
• Basic Instruction (Education, TS 1000)
• Blackjack Tutor (Games, TS 1000)
• Budgeting (Home, TS 1000)
• Cribbage (Games, TS 1000)
• Data Base Conversion (Utilities, TS 1000)
• Decision Tables (Education, TS 1000)
• Draw Poker Tutor (Games, TS 1000)
• Flat Racing (Games, TS 1000)
• Functional Analysis (Math/Science, TS 1000)
• Fundamentals (Finance, TS 1000)
• Integer (Education, TS 1000)
• Job Jar (Home, TS 1000)
• Library (Home, TS 1000)
• Manage Your Stock Portfolio (Finance, TS 1000)
• Real Estate (Finance, TS 1000)
• Stock Options (Finance, TS 1000)
• Writing (Education, TS 1000)

Uitgeverij Wolfkamp

Amsterdam, 1007KG Netherlands

Ultimate Blackwood, The

Santa Cruz, CA 95061
• BDLS (Programming, TS 1000)
• Carver (Games, TS 1000)
• LODAB (Utilities, TS 1000)

Ultimate Software

28 Brownlow Rd., Willesden, London England NW10 9QL

Ultimatum

3470 McKinley Dr., Abbotsfort, BC V2S 6B7 Canada

Upstate Labs

27 Elvira St., Rochester, NY 14606
• Dry Gulch (Games, TS 1000)
• EPROM Cartridge Kit (ROM, TS 1000)
• I/O Ports and EPROM Programmer Plans (Interfacing, TS 1000)
• Morloc Castle (Games, TS 1000)
• Programmers Toolkit and Graphics Routines (Programming, TS 1000)

UPSystems

5800 Hollister, Houston, TX 77040
Owner: R. A. Banks

- UPS-1 (Power, TS 1000)
- UPS-2 (Power, TS 1000)

User Friendly Research

478 W Hamilton Ave, Campbell, CA 95008
• A-D Converter (Interfacing, TS 1000)
• Realtime Clock (Miscellaneous, TS 1000)
• ZXPANDER (Interfacing, TS 1000)
• ZXTALKER (Sound/Speech, TS 1000)

User Friendly Software

Hempstead, NY 11551
• Electric Address Book (Home, TS 1000)
• Hang-Word (Games, TS 1000)

Utilities Engineering

1213 19th Street, Brigantine, NJ 08203
• Air Conditioning Requirements (Business, TS 1000)
• ROM Reader (Programming, TS 1000)

VAL Corporation

1621 N. Wakefield St., Arlington, VA 22207
• Timebox (Miscellaneous, TS 1000)

Variety Sales

175 Osborn Ave, New Haven, CT 06511
• CDESIGN (Graphics, TS 2068)
• Fighter Pilot (Games, TS 2068)

Ventamatic Micro Informatics

Av. de Rhode, 253 17480 Roses Girona Spain
Director: Joseph-Oriol Tomas

- 3D Space Battle (Games, TS 1000)
- Lunar Lander (Games, TS 1000)
- Orchestra (Music/Speech, TS 1000)
- Super ZXClock (Miscellaneous, TS 1000)

Companies

Verlin K. Cross

2842 County Rd., Leadville, CO 80461
• 10 Programs for the ZX81 (Math/Science, TS 1000)

Video Arcade

824 Val Vista Ave, Sheridan, WY 82801
• Pete's Factory (Games, TS 1000)

Vidiom

Providence, RI 02906
• Character Set Graphics Kit (Miscellaneous, TS 1000)

Voicetek

6690 Abrego, Goleta, CA 93017
• Cognivox (Sound/Speech, TS 1000)

VP Hosey

Red Rock, TX 8662
• Battlestar Xemit (Games, TS 2068)
• Start-Rek (Games, TS 2068)

W S M Entertainment

North Hollywood, CA 91616
• Adults Only! (Games, ZX81, TS 1000)
• Cartoons (Art, ZX81, TS 1000)
• Keyboard conversion plans (Keyboard, TS 1000)
• Movie Stuntman (Games, ZX81, TS 1000)
• Slots (Games, ZX81, TS 1000)
• Speed Editing on the ZX81 (Miscellaneous, ZX81, TS 1000)
• Teach Your Tot (Education, ZX81, TS 1000)
• The Company (Games, ZX81, TS 1000)
• Twenty Beginner Programs (Games, ZX81, TS 1000)
• Walnut case for keyboard (Keyboard, TS 1000)

W. G. Squiers

28 West St., Fairfield, ME 04937
• Computer Stand Module (Accessory, TS 1000)

Walter Grundy

Harrisonville, MI 64701
• Bingo (Games, TS 1000)

Companies

Warren Imports Group
81 Brookmill Blvd, Agincourt, Ontario
M1W 2L5

- Contact Lens (Keyboard, TS 1000)

WaterWares
6115 10th Ave. S, Minneapolis, MN
55416

- Tunneling (Games, TS 1000)

Wayne Green Books
Peterborough, NH 03458

Weick
7127 W. Becker Ln, Peoria, AZ 85345

Westridge Communications
2103 Queensferry Rd., Los Angeles,
CA 90049

Owner: Stuart Lotwin.

- Westridge 2050 Modem (RS232, TS 1000, TS 2068)

Weymil Corporation
Bellingham, WA 98227

- Delta Device (RAM, TS 1000)
- Mini XMOD (Terminal, TS 1000)
- Thrust (Art, TS 1000)

White Lightning
Lufkin, TX 75901

- TS 1000 System (Computer, TS 1000)

WHM Software
Roanoke, VA 24012

- Personality Profile (Miscellaneous, TS 1000)

Wida Software
2 Nicholas Gardens, London, W5 5HY
UK

- Wordpack ZX81 1 & 2 (Games, TS 1000)
- Wordpack ZX81 3 (Games, TS 1000)
- Wordpack ZX81 4 (Games, TS 1000)

WIDJUP Company
1120 Merrifield S.E., Grand Rapids, MI
49507

Owner: William J. Pedersen.

- Tourist C (Utilities, TS 2068)
- Typalot GB (Word Processing, TS 2068)
- Typalot J1 (Word Processing, TS 2068)
- Typalot S (Word Processing, TS 2068)
- WIDJUPEEL (Utilities, TS 2068)
- Winkjet 1 (Utilities, TS 2068)

Wiley Press
Somerset, NJ 08873

**Willcocks Research Consul-
tants**
6321 W. 78th Place, Los Angeles, CA
90045

- KARTIK (Games, ZX81, TS 1000, TS 1500)
- Tangle4 (Games, ZX81, TS 1000, TS 1500)

William D. Loeser, MD
1871 Coronado Ave, Youngstown, OH
44504

- Drugs and Bugs (Math/Science, TS 1000)

William Don Maples
688 Moore St., Lakewood, CO 80215

- ABC, Etcetera (Home, TS 1000)
- Kaleidograph (Graphics, TS 1000)
- Player ZX80/Space MUSE-AK (Music/ Speech, ZX80)
- Player ZX81 (Music/Speech, ZX81, TS 1000)
- Squares and Crosses (Games, ZX81, TS 1000)
- Stopwatch (Miscellaneous, ZX81, TS 1000)
- Virtuoso (Music/Speech, TS 1000)

William Stewart Systems
Dower House, Herongate, Brentwood,
England

- Big Ears Speech Recognition (Sound/ Speech, TS 1000)
- Fast Load Program (Utilities, TS 1000)
- Music Composer Program (Music/ Speech, TS 1000)
- Music Synthesizer and I/O Port (Sound/ Speech, TS 1000)
- Speech Synthesis Unlimited (Sound/ Speech, TS 1000)

Williams Enterprises
3101 Cheverly Ave., Cheverly, MD
20785

- Bible Quizzes (Education, TS 1000)
- Books of the Bible: New Testament (Ed- ucation, TS 1000)
- Books of the Bible: Old Testament (Edu- cation, TS 1000)

Wisconsinc Electronics
Milton, WI 53563

- EPROM Copier P-2 (Miscellaneous, TS 1000)
- EPROM Programmer (Miscellaneous, TS 1000)
- I/O Unit (Interfacing, TS 1000)
- Memory board with I/O (Interfacing, RAM, TS 1000)

Wizard Works, The
Walkerville, MI 49459

- Hex Calculator (Programming, ZX81, TS 1000)
- Index/Contents (Utilities, TS 1000)
- Statistical Graph Generator (Math/ Science, TS 1000)
- TV Typewriter (Word Processing, TS 1000)

Wizards, The
The Woodlands, TX 77387

- How to Make Good Investments (Fi- nance, TS 1000)

WMJ Data Systems
4 Butterfly Dr., Hauppauge, NY 11788

- Address Book (Home, TS 1000, TS 2068)
- Appointment Watch (Home, TS 1000, TS 2068)
- Checkrec (Home, TS 1000, TS 2068)
- Colonize the Universe (Games, TS 2068)
- Household Inventory (Home, TS 1000, TS 2068)
- Loan Amortization (Finance, TS 1000)
- Music Library (Database, TS 1000, TS 2068)
- Satellite War (Games, TS 1000)
- Space Base Attack (Games, TS 1000)
- Stock Watch (Finance, TS 1000, TS 2068)

Companies

- Tax Return Organizer (Finance, TS 1000, TS 2068)
- The Dealer's Den (Games, TS 2068)

Wood and Wind Computing
Cornish, NH 03745

Formed by Bill Cable to support the QL. Cable wrote a number of articles and pro- grams for the QL.

- Chaos Busters (Utilities, QL)
- DB-Progs (Database, QL)
- DB-Tutor (Database, QL)
- Helper (Utilities, QL)
- Join (Database, QL)
- Refield (Database, QL)
- Split (Database, QL)

Woods End Laboratory
Kimball Pond Rd., Vienna, ME 04360

- Statistical Correlation (Math/Science, TS 1000)

Word Software
175 Osborn Ave, New Haven, CT
06511

- The Drawing System (Art, TS 1000)

WT Associates
3808 Rosecrans St, San Diego, CA
92110

- WITWATT 1000 (Power, TS 1000)

Wyncom
11 Furze Platt Road, Maidenhead, Eng-
land SL6 7ND

Wyndham Computer Services

- Tutor 1K (Education, ZX80)
- Tutor 2K (Education, ZX80)

XOR
Stratford, ONT N5A 6T3 Canada

- Invaders (Games, TS 1000)

Yagsee Publications
Vicksburg, MI 49097

Publisher of TS User newsletter.

Companies

Youngs’ Computer Publications
2 Woodland Way, Gosfield, Hafstead,
Essex U.K. C09 1TH

Youth Resources Centre, The
388 Dundas St., London, Ontario,
Canada N6B 1V8

- River Crossing (Games, ZX81, TS 1000)

Z-Games
Ringoese, NJ 08551

- Five Games (Games, ZX81, TS 1000)
- Hamware (Math/Science, TS 1000)

Z-Tron International
Monterey Park, CA 91754

- AC Circuit Analysis (Math/Science, TS 1000)
- Disassembler (Programming, TS 1000)
- Disassembler 4K ROM (ROM, TS 1000)
- Extender Card EPROM reader/programmer (Miscellaneous, TS 1000)
- Fast Fourier Transform (Math/Science, TS 1000)

Z-Ware
Albany, KY 42602

- BASIC Handyman (Programming, TS 1000)
- Financial Manager (Home, TS 1000)
- Histogram (Graphics, TS 1000)
- Machine Intelligence Demo (Games, TS 1000)
- Z-80 Software Notebook (Programming, TS 1000)

Z-West
Vista, CA 92083

- Celestial Locator (Math/Science, TS 1000)
- Checkbook Helper (Home, TS 1000)
- Hangman (Games, TS 1000)
- Home File (Home, TS 1000)
- Income Tax (Finance, TS 1000)
- Loan Helper (Finance, TS 1000)

Zamis Engineering
251 First Street, Perrysburgh, OH 43551

- Football (Games, ZX81, TS 1000)

Zebra Systems, Inc.
78-06 Jamaica Ave, Woodhaven, NY 11421

Incorporated in February 1983, and founded by Stewart Newfeld, Zebra Systems developed products for the Timex/Sinclair 1000 and 2068 computers. Newfeld quit a job as plant manager of a manufacturing company to start Zebra Systems, Inc.

Newfeld designed a keyboard-beeper, joystick adapter, A/D converter, and a speech-synthesizer for the TS 1000, TS 1500 and TS 2068. He marketed Zebra products by taking out advertisements in various Timex/Sinclair oriented magazines.

It was a small company, and at its peak, had six employees. Newfeld was the hardware designer, manager/president, and chief cook and bottle washer. In addition, there was a computer programmer; two production people who assembled, soldered and tested product; and one general assistant hobby computer enthusiast. Nearly everyone pitched in with customer service duties, shipping clerk, etc.

Zebra employees included:

- Tom Gee
- Al Hartman
- Jeff Street

Al wrote software, manuals and ran the bulletin board system for Zebra. One BASIC program he wrote made cassette labels. According to Al:

“Zebra did most of the order processing on an IMSAI 8080 upgraded with a Z80 card. We used dBase II with a custom written system to take orders and print out mailing labels and invoices. I also used that system to do the typesetting for our catalogs with a program called Fancy Font (with an RX-80F/T printer). Later, we upgraded to Televideo MS-DOS compatible system, and I just continued to use Fancy Font on it until we got a Mac with a Laserwriter.”

Tom Gee was a hardware design engineer. He created circuit designs for products, including designing the printed circuit boards. He also diagnosed and repaired problems with products returned by customers. Tom also authored some of Zebra’s software.

Jeff Street wrote software for Zebra, most notably the OS 64 cartridge.

Zebra’s survival in the first few years after Timex stopped selling computers was in no small part accomplished by purchasing large quantities of books, software cassettes, trackballs, ZX81 kits, and more at closeout prices.

Just before starting Zebra, Newfeld worked for a company repurposing a large manufacturing building in Bronx that had loading docks and fork lifts.

His former boss let him store entire pallets of computer surplus after he started Zebra.

When Melbourne House got rid of their Timex/Sinclair products, he was offered the remaining copies of “The INS and OUTS of the TS 1000 & ZX81” by Don Thomasson. He purchased them for 10 cents a book, but had to take the pallet of 2000 books. Being able to handle and store 800lb pallets long term was critical to Zebra.

Other notable closeout purchases were 2,800 ZX81 kits, hundreds of RAM and other modules from Memotech, thousands of WICO Trackballs, thousands of books and software cassettes.

In 1985, they imported a small quantity of floppy disk controllers and drives from Timex of Portugal for the TS 2068 computer.

Zebra continued to support Timex/Sinclair computers long after Timex stopped supporting them and transitioned to sup-

Companies

porting other personal computers from Atari, Commodore and Radio Shack.

Zebra Systems is now a web and computer consulting company.

- 3” Diskettes (Cassettes, TS 2068)
- 64K CP/M 2.2 Option (Disk Drive Systems, TS 2068)
- Atari Compatible Joystick (Joystick, TS 2068)
- Banner Designer (Graphics, TS 2068)
- Blippo (Sound/Speech, TS 1000)
- Circus Coloring Book (Art, TS 2068)
- Coloring Book Utility & Linker (Art, TS 2068)
- Deluxe Joystick (Joystick, TS 2068)
- FDD 3 add-on disk drive (Disk Drive Systems, TS 2068)
- FDD Serial Printer Cable (RS232, TS 2068)
- FDD-3000 Spectrum Mode Option (Disk Drive Systems, TS 2068)
- Graphic Tablet for TS2068 (Miscellaneous, TS 2068)
- Green Screen (Accessory, TS 1000)
- Greeting Card Designer (Graphics, TS 2068)
- JB’s Banner Program (Graphics, TS 2068)
- Joystick Adaptor (Joystick, TS 1000)
- Keyboard (Keyboard, TS 1000)
- Keyboard Beeper (Keyboard, TS 1000)
- Keyed and Labeled ZX Connector (Miscellaneous, TS 1000)
- Light Pen (Miscellaneous, TS 1000, TS 2068)
- MTERM II Cartridge (Terminal, TS 2068)
- MTERM/T (Terminal, TS 1000, TS 2068)
- OS 64 Cartridge (ROM, TS 2068)
- OS-64 Utility Tape (Utilities, TS 2068)
- Personal Secretary (Business, TS 2068)
- PJ’s Chromatech (Art, TS 2068)
- Prototyping Board (Interfacing, TS 2068)
- Prototyping Board (Interfacing, ZX81, TS 1000)
- Sign Designer (Graphics, TS 2068)
- Space Adventures Coloring Book (Art, TS 2068)
- Speaker Module (Accessory)

Companies

- Speaker/Amplifier for Zebra-Talker (Accessory)
- Spectrum Emulator Cartridge (Emulator, TS 2068)
- Sprites 2068 (Programming, TS 2068)
- Tech-Draw (Art, TS 2068)
- TechDraw Jr. (Art, TS 2068)
- TS 1000 Trackball (Joystick, TS 1000, TS 2068)
- TS2068 Trackball (Joystick, TS 2068)
- WC2050 Modem Board (RS232, TS 1000, TS 2068)
- WC2050-to-RS232 Kit (RS232, TS 1000, TS 2068)
- WC2050-to-RS232 PC Board (RS232, TS 1000, TS 2068)
- Window Print (Programming, TS 2068)
- Z-Clock (Miscellaneous, TS 2068)
- Z-Stick (Joystick, TS 2068)
- Z-Stick Plus (Joystick, TS 2068)
- Z-Term 64 (Terminal, TS 2068)
- ZAD: Zebra Analog Digital Interface (Interfacing, TS 1000, TS 1500, TS 2068)
- Zebra-Talker 1000 (Sound/Speech, ZX81, TS 1000, TS 1500)
- Zebra-Talker 2068 (Sound/Speech, TS 2068)
- ZPRINT-80 (Utilities, TS 2068)
- ZTalker 1.2 Text-to-Speech Software (Music/Speech, TS 1000, TS 2068)

Zebra X-Ray Software

Chattanooga, TN 37401

- Star Hunter (Games, TS 1000)

Zeen Graphics

Phoenix, AZ 85063

- 2068 Banners (Graphics, TS 2068)

Zeta Base

10451 Tennessee Ave, Los Angeles, CA 90064

- Fastman (Games, TS 1000)

ZETA Software

Greenville, SC 29608

Owner: Jonathan Bobst.

- 10 Games Pack (Games, ZX80)
- Blackjack*Master (Games, TS 1000)
- E.S.P. (Miscellaneous, ZX81)

- Football Forecaster (Games, TS 1000)
- Fundamental Analysis (Finance, TS 1000)
- Ham Radio Pak (Math/Science, TS 1000)
- Math Pak (Math/Science, TS 1000)
- Math Routines and FIT (Math/Science, TS 1000)
- Plane Frame (Math/Science, TS 1000)
- Reversi (Games, TS 1000)
- RPN Calculator (Math/Science, TS 1000)
- Scout Fighter (Games, TS 1000)
- Snake (Games, TS 1000)
- Statistics (Math/Science, TS 1000)
- The ROM Reader (Utilities, TS 1000)
- Torpedo Alley (Games, TS 1000)
- Variance Analyzer (Math/Science, TS 1000)
- Zetapak 1: War Games (Games, ZX81)
- Zetapak 2: Basically BASIC (Education, ZX81)
- Zetapak 3: SciFi Fantasy (Games, ZX81)
- ZetaTrek (Games, TS 1000)

Zodex

East Hill, Oakham, MA 01068

- 6K memory (internal) (RAM, TS 1000)
- CX81 Graphics Module (Graphics, TS 1000)
- Light Pen (Miscellaneous, TS 1000)
- RX81 Robotics Interface (Interfacing, TS 1000, TS 2068)

ZOPF Industries

121 W. Mt. Hope, Lansing, MI 48910

- Stabilizer Pad (Accessory, TS 1000)

ZOR KHAN Industries

Aurora, CO 80041

- Arithmetic Baseball (Education, TS 1000)
- Game Pac (Games, TS 1000)
- Home Manager (Home, TS 1000)
- Party Games for Consenting Adults (Games, TS 1000)
- Primary Association (Education, TS 1000)
- ZK Basketball Relays (Games, TS 1000)
- ZK Football (Games, TS 1000)
- ZK-Party Games (Games, TS 1000)

Zunk Custom Electronics

4800 East Cedar Lane, Norman, OK 73071

Owner: Larry Zunk.

- 32K Internal RAM Modification (RAM, TS 2068)
- Assembler (Programming, TS 2068)
- CADZ (Graphics, TS 2068)
- CHIP (Math/Science, TS 2068)
- Chip Tester and Logic Monitor (Interfacing, TS 2068)
- OS DRAW (Art, TS 2068)
- PINS (Math/Science, TS 2068)
- Real Time Clock (Miscellaneous, TS 2068)
- Souse (Joystick, TS 2068)
- TASWORD for 256K AERCO (Word Processing, TS 2068)
- Weather Station (Miscellaneous, TS 2068)
- ZEBU: Zunk's Extra Basic Utilities (Programming, TS 2068)

ZX Data

16783 Beach Blvd, Huntington Beach, CA 92647

ZX Users Group of New York

Wall St., New York, NY 10005

- 16K MultiProgram (Utilities, TS 1000)

ZX-Guaranteed

29 Chadderton Dr., Unsworth, Bury United Kingdom

- Space Invaders (Games, TS 1000)
- Venture (Games, TS 1000)

ZX-Panding, Ltd.

Newton, NC 28658

- Anypoint Plotter (Math/Science, ZX81, TS 1000)
- Checkbook, Income Tax and Budget Organizer (Home, TS 1000)
- Clocks and Timers (Miscellaneous, ZX81, TS 1000)
- Data Storage and Display System (Database, TS 1000)
- Jogmath (Education, TS 1000)
- The Economy Trio (Miscellaneous, ZX81, TS 1000)

Companies

- Your Special Day (Miscellaneous, ZX81, TS 1000)

ZX-Vision

Ringoes, NJ 08551

- Laser Invasion (Games, TS 1000)

ZX1040 Software

3311 Thomas Dr., Palo Alto, CA 94393

Glenn A. Smith.

- ZX1040 (Finance, TS 1000)

ZX80/81 Users Library

4614 Kilauea Ave., Honolulu. HI 96816

ZX81 Programs

106-B Antoinette Ct., Charlottesville, VA 22903

- Compusheet (Spreadsheet, TS 1000)
- Fastsort (Utilities, TS 1000)
- Z80 Disassembler (Programming, TS 1000)

ZXAD Software Unlimited

404 Edgewood Dr., Exton, PA 19341

Programs for the ZX81 or T/S 1000. Games, business, household, education, graphics, and other general items.

ZxCo

Syosset, NY 11791

- Graphic Calculator (Math/Science, ZX81, TS 1000)

ZXSystems Software

Pembroke Pines, FL 33024

- ZX-Pack (Miscellaneous, TS 1000)

